

Connecting via Winsock to STN

3/8/08

Welcome to STN International! Enter x:x

LOGINID:SSPTANAG1626

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

\* \* \* \* \* \* \* \* \* Welcome to STN International \* \* \* \* \* \* \* \* \*

NEWS 1 Web Page URLs for STN Seminar Schedule - N. America  
 NEWS 2 "Ask CAS" for self-help around the clock  
 NEWS 3 DEC 05 CASREACT(R) - Over 10 million reactions available  
 NEWS 4 DEC 14 2006 MeSH terms loaded in MEDLINE/LMEDLINE  
 NEWS 5 DEC 14 2006 MeSH terms loaded for MEDLINE file segment of TOXCENTER  
 NEWS 6 DEC 14 CA/CAplus to be enhanced with updated IPC codes  
 NEWS 7 DEC 21 IPC search and display fields enhanced in CA/CAplus with the  
     IPC reform  
 NEWS 8 DEC 23 New IPC8 SEARCH, DISPLAY, and SELECT fields in USPATFULL/  
     USPAT2  
 NEWS 9 JAN 13 IPC 8 searching in IFIPAT, IFIUDB, and IFICDB  
 NEWS 10 JAN 13 New IPC 8 SEARCH, DISPLAY, and SELECT enhancements added to  
     INPADOC  
 NEWS 11 JAN 17 Pre-1988 INPI data added to MARPAT  
 NEWS 12 JAN 17 IPC 8 in the WPI family of databases including WPIFV  
 NEWS 13 JAN 30 Saved answer limit increased  
 NEWS 14 JAN 31 Monthly current-awareness alert (SDI) frequency  
     added to TULSA  
 NEWS 15 FEB 21 STN AnaVist, Version 1.1, lets you share your STN AnaVist  
     visualization results  
 NEWS 16 FEB 22 Status of current WO (PCT) information on STN  
 NEWS 17 FEB 22 The IPC thesaurus added to additional patent databases on STN  
 NEWS 18 FEB 22 Updates in EPFULL; IPC 8 enhancements added  
 NEWS 19 FEB 27 New STN AnaVist pricing effective March 1, 2006  
 NEWS 20 FEB 28 MEDLINE/LMEDLINE reload improves functionality  
 NEWS 21 FEB 28 TOXCENTER reloaded with enhancements  
 NEWS 22 FEB 28 REGISTRY/ZREGISTRY enhanced with more experimental spectral  
     property data  
 NEWS 23 MAR 01 INSPEC reloaded and enhanced  
 NEWS 24 MAR 03 Updates in PATDPA; addition of IPC 8 data without attributes  
 NEWS 25 MAR 08 X.25 communication option no longer available after June 2006  
  
 NEWS EXPRESS FEBRUARY 15 CURRENT VERSION FOR WINDOWS IS V8.01a,  
     CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),  
     AND CURRENT DISCOVER FILE IS DATED 19 DECEMBER 2005.  
     V8.0 AND V8.01 USERS CAN OBTAIN THE UPGRADE TO V8.01a AT  
     <http://download.cas.org/express/v8.0-Discover/>  
  
 NEWS HOURS STN Operating Hours Plus Help Desk Availability  
 NEWS INTER General Internet Information  
 NEWS LOGIN Welcome Banner and News Items  
 NEWS PHONE Direct Dial and Telecommunication Network Access to STN  
 NEWS WWW CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that

• specific topic.

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

FILE 'HOME' ENTERED AT 18:09:00 ON 08 MAR 2006

FILE 'REGISTRY' ENTERED AT 18:09:35 ON 08 MAR 2006  
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
COPYRIGHT (C) 2006 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 7 MAR 2006 HIGHEST RN 876109-17-0  
DICTIONARY FILE UPDATES: 7 MAR 2006 HIGHEST RN 876109-17-0

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH January 6, 2006

Please note that search-term pricing does apply when conducting SmartSELECT searches.

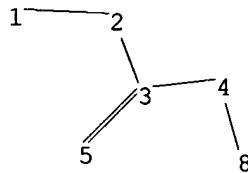
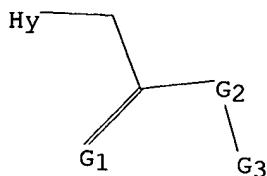
```
*****
* The CA roles and document type information have been removed from
* the IDE default display format and the ED field has been added,
* effective March 20, 2005. A new display format, IDERL, is now
* available and contains the CA role and document type information.
*****
*****
```

Structure search iteration limits have been increased. See HELP SLIMITS for details.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

<http://www.cas.org/ONLINE/UG/reqprops.html>

=>  
Uploading C:\Program Files\Stnexp\Queries\10765267amend.str



chain nodes :  
1 2 3 4 5 8  
chain bonds :  
1-2 2-3 3-4 3-5 4-8  
exact/norm bonds :  
1-2 3-4 3-5 4-8  
exact bonds :  
2-3

G1:O,S,N

G2:O,S

G3:Ph,o-C6H4,m-C6H4,p-C6H4,Hy

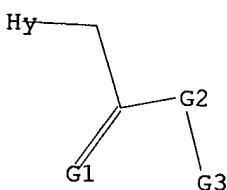
Match level :  
1:Atom 2:CLASS 3:CLASS 4:CLASS 5:CLASS 8:CLASS  
Generic attributes :  
1:  
Saturation : Saturated  
Number of Carbon Atoms : less than 7  
Type of Ring System : Monocyclic

Element Count :  
Node 1: Limited

N, N1-2  
C, C4-5  
O, O0-1

L1 STRUCTURE UPLOADED

=> d l1  
L1 HAS NO ANSWERS  
L1 STR



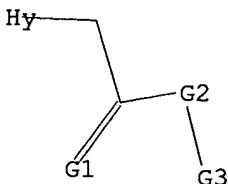
G1 O,S,N

G2 O,S

G3 Ph,o-C6H4,m-C6H4,p-C6H4,Hy

Structure attributes must be viewed using STN Express query preparation.

=> d 11  
L1 HAS NO ANSWERS  
L1 STR



G1 O,S,N  
G2 O,S  
G3 Ph,o-C<sub>6</sub>H<sub>4</sub>,m-C<sub>6</sub>H<sub>4</sub>,p-C<sub>6</sub>H<sub>4</sub>,Hy

Structure attributes must be viewed using STN Express query preparation.

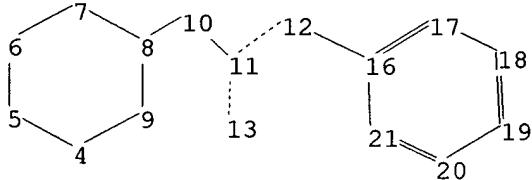
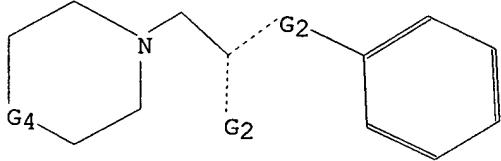
=> s 11  
SAMPLE SEARCH INITIATED 18:10:02 FILE 'REGISTRY'  
SAMPLE SCREEN SEARCH COMPLETED - 1092423 TO ITERATE

0.2% PROCESSED 2000 ITERATIONS 0 ANSWERS  
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)  
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*INCOMPLETE\*\*  
BATCH \*\*INCOMPLETE\*\*  
PROJECTED ITERATIONS: 21794380 TO 21902540  
PROJECTED ANSWERS: 0 TO 0

L2 0 SEA SSS SAM L1

=>  
Uploading C:\Program Files\Stnexp\Queries\10765267phen152841.str



chain nodes :  
10 11 12 13  
ring nodes :  
4 5 6 7 8 9 16 17 18 19 20 21  
chain bonds :  
8-10 10-11 11-12 11-13 12-16  
ring bonds :  
4-5 4-9 5-6 6-7 7-8 8-9 16-17 16-21 17-18 18-19 19-20 20-21  
exact/norm bonds :  
4-5 4-9 5-6 6-7 7-8 8-9 8-10 10-11 11-12 11-13 12-16  
normalized bonds :

- 10765267Amend

- 16-17 16-21 17-18 18-19 19-20 20-21

G1:O,S,N

G2:O,S

G3:Ph,o-C6H4,m-C6H4,p-C6H4,Hy

G4:CH2,O,N

Match level :

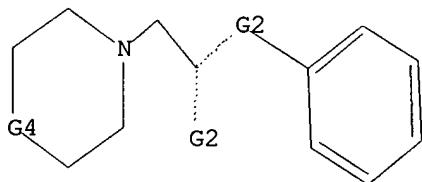
4:Atom 5:Atom 6:CLASS 7:CLASS 8:Atom 9:CLASS 10:CLASS 11:CLASS 12:CLASS 13:CLASS  
16:Atom 17:Atom 18:Atom 19:Atom 20:Atom 21:CLASS

L3 14 STRUCTURE UPLOADED

=> d 13

L3 HAS NO ANSWERS

L3 STR



G1 O,S,N

G2 O,S

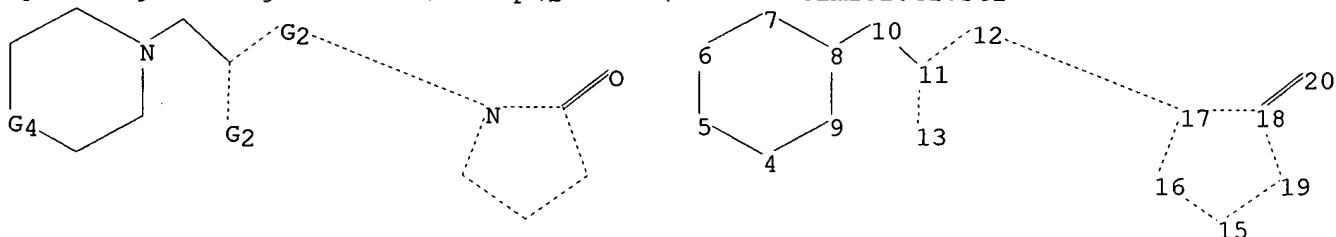
G3 Ph,o-C6H4,m-C6H4,p-C6H4,Hy

G4 CH2,O,N

Structure attributes must be viewed using STN Express query preparation.

=>

Uploading C:\Program Files\Stnexp\Queries\10765267clm152841.str



chain nodes :

10 11 12 13 20

ring nodes :

4 5 6 7 8 9 15 16 17 18 19

chain bonds :

8-10 10-11 11-12 11-13 12-17 18-20

ring bonds :

- 10765267Amend

- 4-5 4-9 5-6 6-7 7-8 8-9 15-16 15-19 16-17 17-18 18-19  
exact/norm bonds :  
4-5 4-9 5-6 6-7 7-8 8-9 8-10 10-11 11-12 11-13 12-17 15-16 15-19 16-17  
17-18 18-19 18-20

G1:O,S,N

G2:O,S

G3:Ph,o-C6H4,m-C6H4,p-C6H4,Hy

G4:CH2,O,N

Match level :

4:Atom 5:Atom 6:CLASS 7:CLASS 8:Atom 9:CLASS 10:CLASS 11:CLASS 12:CLASS 13:CLASS  
15:Atom 16:Atom 17:Atom 18:Atom 19:Atom 20:CLASS

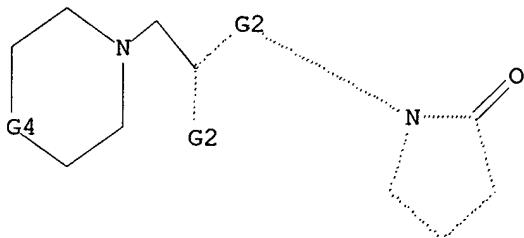
L4 STRUCTURE UPLOADED

L16

=> d 14

L4 HAS NO ANSWERS

L4 STR



G1 O,S,N

G2 O,S

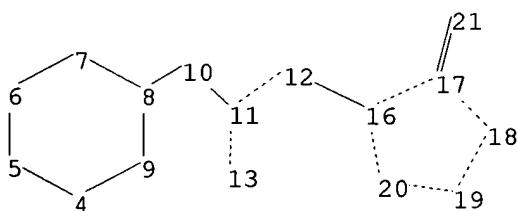
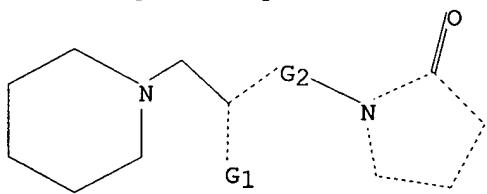
G3 Ph,o-C6H4,m-C6H4,p-C6H4,Hy

G4 CH2,O,N

Structure attributes must be viewed using STN Express query preparation.

=>

Uploading C:\Program Files\Stnexp\Queries\1076526771.str



chain nodes :

10 11 12 13 21

ring nodes :

- 10765267Amend

- 4 5 6 7 8 9 16 17 18 19 20  
chain bonds :  
8-10 10-11 11-12 11-13 12-16 17-21  
ring bonds :  
4-5 4-9 5-6 6-7 7-8 8-9 16-17 16-20 17-18 18-19 19-20  
exact/norm bonds :  
4-5 4-9 5-6 6-7 7-8 8-9 8-10 11-12 11-13 12-16 16-17 16-20 17-18 17-21  
18-19 19-20  
exact bonds :  
10-11

G1:O,S,N

G2:O,S

G3:Ph,o-C6H4,m-C6H4,p-C6H4,Hy

G4:CH2,O,N

Match level :

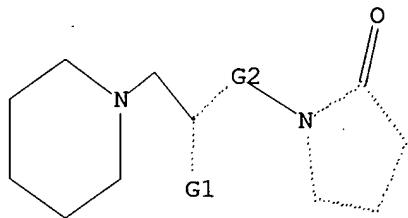
4:Atom 5:Atom 6:CLASS 7:CLASS 8:Atom 9:CLASS 10:CLASS 11:CLASS 12:CLASS 13:CLASS  
16:Atom 17:Atom 18:Atom 19:Atom 20:Atom 21:CLASS

L5 STRUCTURE UPLOADED 43

=> d 15

L5 HAS NO ANSWERS

L5 STR



G1 O,S,N

G2 O,S

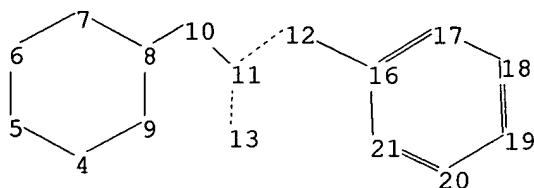
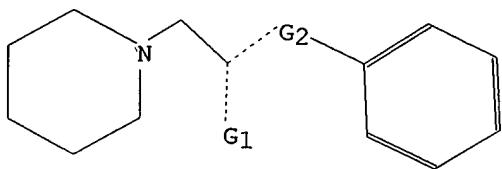
G3 Ph,o-C6H4,m-C6H4,p-C6H4,Hy

G4 CH2,O,N

Structure attributes must be viewed using STN Express query preparation.

=>

Uploading C:\Program Files\Stnexp\Queries\10765267phen71.str



chain nodes :

10 11 12 13

ring nodes :

4 5 6 7 8 9 16 17 18 19 20 21

chain bonds :

8-10 10-11 11-12 11-13 12-16

ring bonds :

4-5 4-9 5-6 6-7 7-8 8-9 16-17 16-21 17-18 18-19 19-20 20-21

exact/norm bonds :

4-5 4-9 5-6 6-7 7-8 8-9 8-10 11-12 11-13 12-16

exact bonds :

10-11

normalized bonds :

16-17 16-21 17-18 18-19 19-20 20-21

G1:O,S,N

G2:O,S

G3:Ph, o-C<sub>6</sub>H<sub>4</sub>, m-C<sub>6</sub>H<sub>4</sub>, p-C<sub>6</sub>H<sub>4</sub>, HyG4:CH<sub>2</sub>,O,N

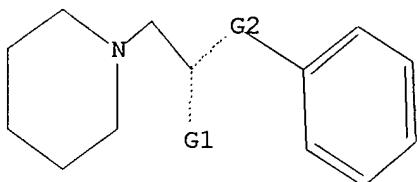
Match level :

4:Atom 5:Atom 6:CLASS 7:CLASS 8:Atom 9:CLASS 10:CLASS 11:CLASS 12:CLASS 13:CLASS  
16:Atom 17:Atom 18:Atom 19:Atom 20:Atom 21:CLASSL6 STRUCTURE UPLOADED *L15*

=&gt; d 16

L6 HAS NO ANSWERS

L6 STR



G1 O,S,N

G2 O,S

G3 Ph, o-C<sub>6</sub>H<sub>4</sub>, m-C<sub>6</sub>H<sub>4</sub>, p-C<sub>6</sub>H<sub>4</sub>, HyG4 CH<sub>2</sub>,O,N

Structure attributes must be viewed using STN Express query preparation.

=> s 13  
 SAMPLE SEARCH INITIATED 18:22:14 FILE 'REGISTRY'  
 SAMPLE SCREEN SEARCH COMPLETED - 3900 TO ITERATE

51.3% PROCESSED 2000 ITERATIONS 12 ANSWERS  
 INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)  
 SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
 BATCH \*\*COMPLETE\*\*  
 PROJECTED ITERATIONS: 74255 TO 81745  
 PROJECTED ANSWERS: 178 TO 758

L7 12 SEA SSS SAM L3

=> s 13 full  
 FULL SEARCH INITIATED 18:22:20 FILE 'REGISTRY'  
 FULL SCREEN SEARCH COMPLETED - 78363 TO ITERATE

100.0% PROCESSED 78363 ITERATIONS 605 ANSWERS  
 SEARCH TIME: 00.00.01

L8 605 SEA SSS FUL L3

=> s 14  
 SAMPLE SEARCH INITIATED 18:22:34 FILE 'REGISTRY'  
 SAMPLE SCREEN SEARCH COMPLETED - 13 TO ITERATE

100.0% PROCESSED 13 ITERATIONS 1 ANSWERS  
 SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
 BATCH \*\*COMPLETE\*\*  
 PROJECTED ITERATIONS: 44 TO 476  
 PROJECTED ANSWERS: 1 TO 80

L9 1 SEA SSS SAM L4

=> s 14 full  
 FULL SEARCH INITIATED 18:22:40 FILE 'REGISTRY'  
 FULL SCREEN SEARCH COMPLETED - 267 TO ITERATE

100.0% PROCESSED 267 ITERATIONS 24 ANSWERS  
 SEARCH TIME: 00.00.01

L10 24 SEA SSS FUL L4

=> s 14  
 SAMPLE SEARCH INITIATED 18:22:53 FILE 'REGISTRY'  
 SAMPLE SCREEN SEARCH COMPLETED - 13 TO ITERATE

100.0% PROCESSED 13 ITERATIONS 1 ANSWERS  
 SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
 BATCH \*\*COMPLETE\*\*  
 PROJECTED ITERATIONS: 44 TO 476  
 PROJECTED ANSWERS: 1 TO 80

L11 1 SEA SSS SAM L4

=> s 15  
 SAMPLE SEARCH INITIATED 18:23:01 FILE 'REGISTRY'  
 SAMPLE SCREEN SEARCH COMPLETED - 16 TO ITERATE

100.0% PROCESSED 16 ITERATIONS 2 ANSWERS  
 SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
 BATCH \*\*COMPLETE\*\*  
 PROJECTED ITERATIONS: 80 TO 560  
 PROJECTED ANSWERS: 2 TO 124

L12 2 SEA SSS SAM L5

=> s 15 full  
 FULL SEARCH INITIATED 18:23:06 FILE 'REGISTRY'  
 FULL SCREEN SEARCH COMPLETED - 312 TO ITERATE

100.0% PROCESSED 312 ITERATIONS 16 ANSWERS  
 SEARCH TIME: 00.00.01

L13 16 SEA SSS FUL L5

=> s 16  
 SAMPLE SEARCH INITIATED 18:23:16 FILE 'REGISTRY'  
 SAMPLE SCREEN SEARCH COMPLETED - 2849 TO ITERATE

70.2% PROCESSED 2000 ITERATIONS 9 ANSWERS  
 INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)  
 SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
 BATCH \*\*COMPLETE\*\*  
 PROJECTED ITERATIONS: 53779 TO 60181  
 PROJECTED ANSWERS: 42 TO 470

L14 9 SEA SSS SAM L6

=> s 16 full  
 FULL SEARCH INITIATED 18:23:20 FILE 'REGISTRY'  
 FULL SCREEN SEARCH COMPLETED - 56321 TO ITERATE

100.0% PROCESSED 56321 ITERATIONS 342 ANSWERS  
 SEARCH TIME: 00.00.01

L15 342 SEA SSS FUL L6

=> fil hcaplus		SINCE FILE	TOTAL
COST IN U.S. DOLLARS		ENTRY	SESSION
FULL ESTIMATED COST		676.56	676.77

FILE 'HCAPLUS' ENTERED AT 18:23:48 ON 08 MAR 2006  
 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
 PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
 COPYRIGHT (C) 2006 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is

held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 8 Mar 2006 VOL 144 ISS 11  
FILE LAST UPDATED: 7 Mar 2006 (20060307/ED)

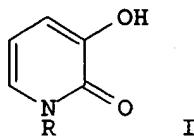
New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

```
=> s l8
L16      143 L8

=> s l16 and (isotop?)
      321646 ISOTOP?
L17      3 L16 AND (ISOTOP?)

=> d ed abs ibib hitstr 1-3
```

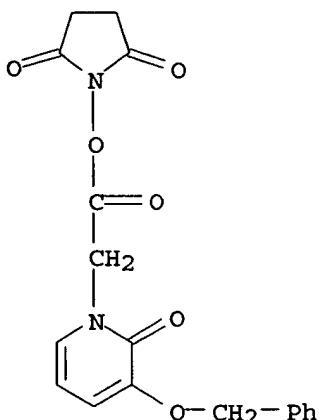


AB The synthesis of a range of novel bidentate, e.g., I ( $R =$  alkyl or alkylaminocarbonylmethyl), and hexadentate ligands containing the chelating moiety 3-hydroxy-2(1H)-pyridinone is described. The pKa values of the ligands and the stability consts. of their iron(III) complexes were determined. The stability constant of the iron(III) complex of one of the hexadentate ligands is comparable to that of desferrioxamine B. The distribution coeffs. of the ligands and their iron(III) complexes were also determined. One of the novel hexadentate compds. markedly enhanced iron(III) excretion from both hepatocytes and iron-overloaded mice.

IT 95215-73-9P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and reaction of, with amines)

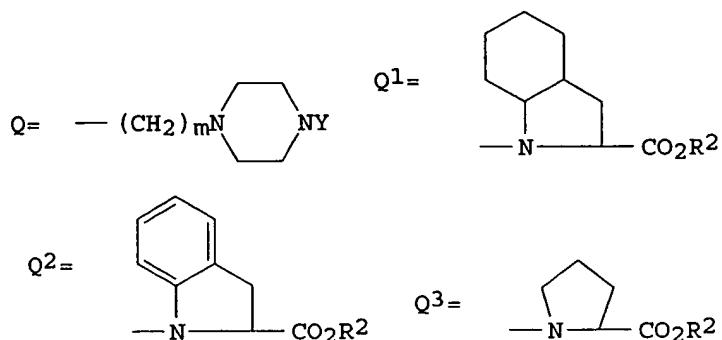
RN 95215-73-9 HCPLUS

CN 2,5-Pyrrolidinedione, 1-[[[2-oxo-3-(phenylmethoxy)-1(2H)-pyridinyl]acetyl]oxy]- (9CI) (CA INDEX NAME)



L8 ANSWER 20 OF 29 HCPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1990:7937 HCPLUS  
 DOCUMENT NUMBER: 112:7937  
 TITLE: Preparation and testing of tripeptide derivatives as cardiovascular agents  
 INVENTOR(S): Sawayama, Tadahiro; Nishimura, Kazuya; Deguchi, Takashi  
 PATENT ASSIGNEE(S): Dainippon Pharmaceutical Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

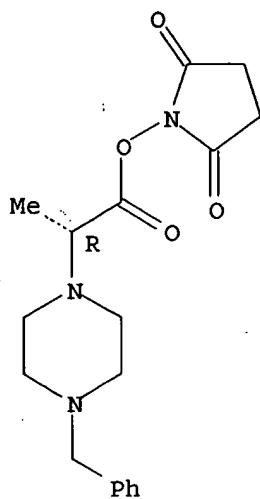
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 01125357	A2	19890517	JP 1987-281873	19871106
PRIORITY APPLN. INFO.:			JP 1987-281873	19871106
OTHER SOURCE(S):	MARPAT	112:7937		
GI				



**AB** RR1CHCONHCH(CO2R2)(CH2)2COR3 [I; R = H, lower alkyl, PhCH2; R1 = (NH)m(CH2)nW, Q; R2 = H, lower alkyl; R3 = Q1, Q2, Q3, NR4CHR2CO2R2; W = H, CO2H, NH2, OH; Y = H, lower alkyl, Ph, PhCH2; R4 = C4-8 cycloalkyl, halo, alkoxy, (OH-substituted) Ph; m = 0, 1; n = 0-4] and their salts are prepared Refluxing 28 g 2-(S)-bromopropionic acid with 42 g PhCH2OH in PhMe gave 17.0 g benzyl 2-(S)-bromopropionate, 2.2 g of which was stirred with 1.6 g 1-benzylpiperazine in MeCN, then hydrolyzed with aqueous NaOH to give 1.0 g 2-(R)-(4-benzylpiperazinyl)propionic acid (II). Then, 24.5 g N-benzyloxycarbonyl-01-ethyl-D-glutamic acid was stirred with 17.5 g Et (2S, 3aS, 7aS)-octahydro-1H-indole-2-carboxylate-HCl in CH2Cl2, then reduced, and then hydrolyzed with aqueous NaOH to give 15.01 g (2S, 3aS, 7aS)-1-( $\gamma$ -D-glutamyl)octahydro-1H-indole-2-carboxylic acid (III). Then, 0.8 g II was treated with 0.4 g N-hydroxysuccinimide in CHCl3 to give 2-(R)-(4-benzylpiperazinyl)propionic acid N-hydroxysuccinimide ester, which was treated with 1.0 g III in THF to give 0.8 g (2S, 3aS, 7aS)-1-[N-2(R)-(4-benzylpiperazinyl)propionyl]- $\gamma$ -D-glutamyl]octahydro-1H-indole-2-carboxylic acid, 0.4 g of which was refluxed with HCO2H in MeOH in the presence of Pd black for 4 h to give 0.2 g (2S, 3aS, 7aS)-1-[N-(2R)-piperazinylpropionyl]- $\gamma$ -D-glutamyl]octahydro-1H-indole-2-carboxylic acid, which showed an IC50 of 2.1 + 10-7 M against angiotensin converting enzyme.

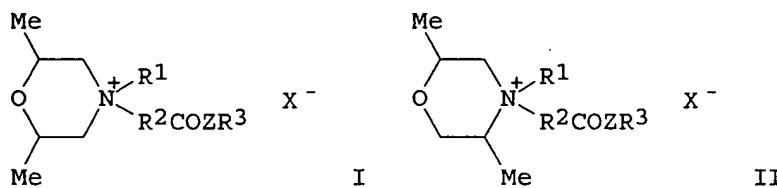
IT 124078-64-4P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
(Reactant or reagent)  
(preparation and condensation of, with (glutamyl)indolecarboxylic acid)  
RN 124078-64-4 HCAPLUS  
CN 2,5-Pyrrolidinedione, 1-[1-oxo-2-[4-(phenylmethyl)-1-piperazinyl]propoxy]-  
, (R)- (9CI) (CA INDEX NAME)

## Absolute stereochemistry.

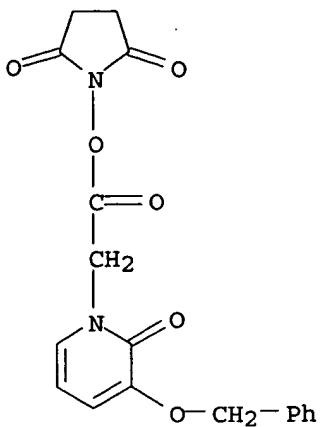


L8 ANSWER 21 OF 29 HCPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1989:589581 HCPLUS  
 DOCUMENT NUMBER: 111:189581  
 TITLE: Morpholinoalkylcarboxylates as plant growth regulators and fungicides  
 INVENTOR(S): Ballschuh, Detlef; Banasiak, Lothar; Gruenzel, Hermann; Kluge, Eberhard; Lyr, Horst; Ohme, Roland; Rusche, Jochen; Seibt, Horst; Spengler, Dieter; Stoeckel, Christian  
 PATENT ASSIGNEE(S): Akademie der Landwirtschaftswissenschaften der DDR, Institut fuer Pflanzenschutzforschung, Ger. Dem. Rep.  
 SOURCE: Ger. (East), 28 pp.  
 CODEN: GEXXA8  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DD 263688	A1	19890111	DD 1985-278326	19850705
PRIORITY APPLN. INFO.:			DD 1985-278326	19850705
OTHER SOURCE(S): GI	MARPAT	111:189581		



AB Mixts. of the title compds. I and II [R1 = C6-20; R2 = C1-6 alkylene; R3 = (un)substituted alkyl, alkenyl, cycloalkyl, etc.; Z = 0, S; X- = anion]



L8 ANSWER 24 OF 29 HCPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1987:156487 HCPLUS

DOCUMENT NUMBER: 106:156487

TITLE: Salts of morpholinocarboxylic esters and  
morpholinoalkyl phenyl ethers, processes for their  
preparation, and their use as fungicides and plant  
growth regulators.INVENTOR(S): Banasiak, Lothar; Leuner, Brita; Lyr, Horst; Nega,  
Eva; Sunkel, MariannePATENT ASSIGNEE(S): Institut fuer Pflanzenschutzforschung Kleinmachnow,  
Ger. Dem. Rep.SOURCE: Eur. Pat. Appl., 41 pp.  
CODEN: EPXXDW

DOCUMENT TYPE: Patent

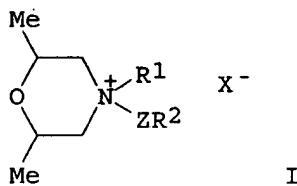
LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

## PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 209763	A1	19870128	EP 1986-108916	19860701
R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE				
DD 263685	A1	19890111	DD 1985-278323	19850705
DD 263687	A1	19890111	DD 1985-278325	19850705
AU 8659401	A1	19870108	AU 1986-59401	19860630
DK 8603151	A	19870106	DK 1986-3151	19860702
FI 8602851	A	19870106	FI 1986-2851	19860704
ZA 8605002	A	19870325	ZA 1986-5002	19860704
JP 62084065	A2	19870417	JP 1986-156349	19860704
HU 42288	A2	19870728	HU 1986-2826	19860704
HU 42286	A2	19870728	HU 1986-2827	19860704
ES 2001853	A6	19880701	ES 1986-125	19860704
PL 146362	B1	19890131	PL 1986-260474	19860704
CS 264279	B2	19890613	CS 1986-5135	19860707
PRIORITY APPLN. INFO.:			DD 1985-278323	A 19850705
			DD 1985-278325	A 19850705

GI

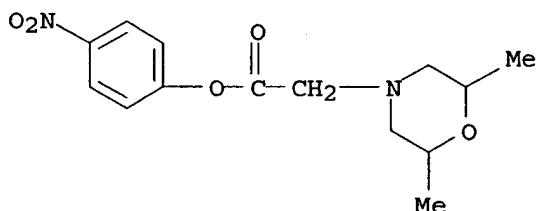


AB The title compds. [I; R = C<sub>6</sub>-20 alkyl; R<sub>2</sub> = R<sub>3</sub>Z<sub>1</sub>CO, (un)substituted PhO; R<sub>3</sub> = (halo)alkenyl, alkynyl, (un)substituted alkyl, cycloalkyl, aryl, aralkyl; X<sub>1</sub> = anion of a nonphytotoxic acid; Z = O, S; Z<sub>1</sub> = C<sub>1</sub>-6 alkylene; R<sub>3</sub> and X- may be absent] were prepared as fungicides and plant growth regulators. A mixture of 30 g 4-isotridecyl-2,6-dimethylmorpholine and 10.9 g ClCH<sub>2</sub>CO<sub>2</sub>Me was refluxed 20 h in MeCN containing catalytic NaI to give 38 g I (R<sub>1</sub> = isotridecyl, R<sub>2</sub> = CO<sub>2</sub>Me, X = Cl, Z = CH<sub>2</sub>) (II). At 10 µg/mL II gave 88% inhibition of growth of Botrytis cinerea. At 1000 mg/L II reduced the growth of cucumber plants by 32%.

IT 107562-00-5DP, quaternary derivs. 107562-11-8DP,  
quaternary derivs.  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of, as fungicide and plant growth inhibitor)

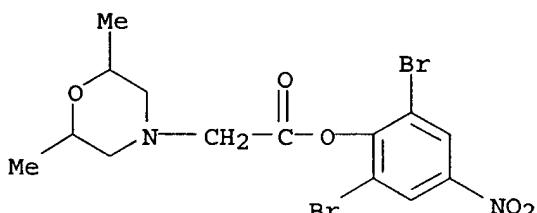
RN 107562-00-5 HCPLUS

CN 4-Morpholineacetic acid, 2,6-dimethyl-, 4-nitrophenyl ester (9CI) (CA INDEX NAME)



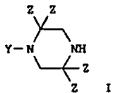
RN 107562-11-8 HCPLUS

CN 4-Morpholineacetic acid, 2,6-dimethyl-, 2,6-dibromo-4-nitrophenyl ester (9CI) (CA INDEX NAME)



L8 ANSWER 25 OF 29 HCPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1985:596001 HCPLUS  
 DOCUMENT NUMBER: 103:196001  
 TITLE: Hydroxypyridinone derivatives and pharmaceutical compositions containing them  
 INVENTOR(S): Hider, Robert Charles; Kontoghiorghes, George; Silver,

L17 ANSWER 1 OF 3 HCAPLUS COPYRIGHT 2006 ACS on STN  
ED Entered STN: 08 Jul 2005  
GI



**AB** Isotopically enriched N-substituted piperazines (I) or salts thereof, comprising one or more heavy atom isotopes (Y = straight chain or branched C1-6 alkyl or C1-6 alkyl ether group wherein the carbon atoms of the alkyl group or alkyl ether group each independently comprise linked hydrogen, deuterium or fluorine atoms; Z = independently H, F, Cl, Br, iodide, an amino acid side chain, a straight chain or branched C1-6 alkyl group that may optionally contain a substituted or unsubstituted aryl group wherein the carbon atoms of the alkyl and aryl groups each independently comprise linked H or F atoms, a straight chain or branched C1-6 alkyl ether group that may optionally contain a substituted or unsubstituted aryl group (wherein the carbon atoms of the alkyl and aryl groups each independently comprise linked hydrogen or fluorine atoms), or a straight chain or branched C1-6 alkoxy group that may optionally contain a substituted or unsubstituted aryl group (wherein the carbon atoms of the alkyl and aryl groups each independently comprise linked hydrogen or fluorine atoms) wherein the N-methylpiperazine is isotopically enriched with either of <sup>13</sup>C and/or <sup>15</sup>N) are prepared. N-substituted piperazines can be used as intermediates in the synthesis of N-substituted piperazine acetic acids which in turn can be used as intermediates in the synthesis of active esters of N-substituted piperazine acetic acid. The active esters of N-substituted piperazine acetic acid can be used as labeling reagents to prepare a set of isotopic labeling reagents. The set of isotopic labeling reagents can be used to label analytes such as peptides, proteins, amino acids, oligonucleotides, DNA, RNA, lipids, carbohydrates, steroids, small molecules and the like (no data). Thus, to a stirring solution of 1.18 g (11.83 mmol) N-methylpiperazine in 15 mL toluene at room temperature was added 1 g (5.91 mmol) of Et bromoacetate, 1,2-<sup>13</sup>C dropwise, over a period of 15 min. The reaction mixture was then heated in an oil bath at 90° for 1 h, cooled to room temperature, filtered to remove the off-white solid to give, after workup on the combined filtrate and washings, 1.10 g (quant.) of 4-methylpiperazine-1-acetic acid Et ester-1,2-<sup>13</sup>C (I) as an off-white oil. I (1.1 g) was refluxed in water for 24 h to give 780 mg 4-methylpiperazine-1-acetic acid-1,2-<sup>13</sup>C.

ACCESSION NUMBER: 2005:592130 HCAPLUS

DOCUMENT NUMBER: 143:115574

TITLE: Preparation of isotopically enriched

N-substituted piperazines

INVENTOR(S): Pappu, Darryl J.; Pillai, Sasi; Coull, James M.

PATENT ASSIGNEE(S): Applica Corp., USA

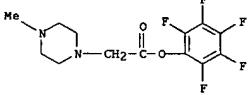
SOURCE: U.S. Pat. Appl. Publ., 29 pp.

CODEN: USXXCO

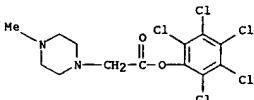
DOCUMENT TYPE: Patent

LANGUAGE: English

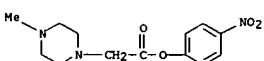
L17 ANSWER 1 OF 3 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)



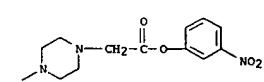
RN 857503-00-5 HCAPLUS  
CN 1-Piperazineacetic acid, 4-methyl-, pentachlorophenyl ester (9CI) (CA INDEX NAME)



RN 857503-01-6 HCAPLUS  
CN 1-Piperazineacetic acid, 4-methyl-, 4-nitrophenyl ester (9CI) (CA INDEX NAME)



RN 857503-03-8 HCAPLUS  
CN 1-Piperazineacetic acid, 4-methyl-, 3-nitrophenyl ester (9CI) (CA INDEX NAME)

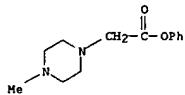


L17 ANSWER 1 OF 3 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)  
FAMILY ACC. NUM. COUNT: 6  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2005146773	A1	20050707	US 2004-751388	20040105
WO 2005068446	A1	20050728	US 2005-US223	20050105
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HK, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZH, ZW, RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GO, GW, ML, MR, NE, SN, TD, TG				
PRIORITY APPLN. INFO.:		US 2004-751353	A	20040105
		US 2004-751354	A	20040105
		US 2004-751387	A	20040105
		US 2004-751388	A	20040105
		US 2004-822639	A	20040412
		US 2004-852730	A	20040524

OTHER SOURCE(S): MARPAT 143:115574  
IT 856187-95-6, 4-Methylpiperazine-1-acetic acid phenyl ester  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(preparation of isotopically enriched N-substituted piperazines as isobaric labeling reagents)

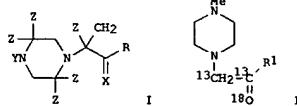
RN 856187-95-6 HCAPLUS  
CN 1-Piperazineacetic acid, 4-methyl-, phenyl ester (9CI) (CA INDEX NAME)



IT 857027-10-2P 857503-00-5P 857503-01-6P  
857503-03-8P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of isotopically enriched N-substituted piperazines as isobaric labeling reagents)

RN 857027-10-2 HCAPLUS  
CN 1-Piperazineacetic acid, 4-methyl-, pentafluorophenyl ester (9CI) (CA INDEX NAME)

L17 ANSWER 2 OF 3 HCAPLUS COPYRIGHT 2006 ACS on STN  
ED Entered STN: 08 Jul 2005  
GI



**AB** In some embodiments, this invention pertains to active esters of N-substituted piperazine acetic acid I (R = leaving group; X = O, S; Y = C1-C6 alkyl, C1-C6 alkyl ether; Z = H, 2H, F, Cl, Br, iodide, amino acid side chain, C1-C6 alkyl, C1-C6 alkyl ether), including isotopically enriched versions thereof. In some embodiments, this invention pertains to methods for the preparation of active esters of N-substituted piperazine acetic acid, including isotopically enriched versions thereof. For example, the isotopically labeled N-methylpiperazine II (R1 = 180H) reacted with the trifluoroacetic acid ester of N-hydroxysuccinimide to give the succinate II (R1 = OR2, R2 = succinimido).

ACCESSION NUMBER: 200592129 HCAPLUS

DOCUMENT NUMBER: 143:97398

TITLE: Preparation of active esters of N-substituted

piperazine acetic acids, including

isotopically enriched versions

INVENTOR(S): Dey, Subhakar; Pappin, Darryl J. C.; Purnayastha,

Subhasish Pillai, Sasi; Coull, James M.

PATENT ASSIGNEE(S): Applica Corp., USA

SOURCE: U.S. Pat. Appl. Publ., 33 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

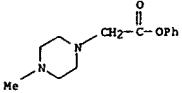
FAMILY ACC. NUM. COUNT: 6

PATENT INFORMATION:

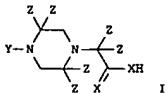
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2005146771	A1	20050707	US 2004-751354	20040105
WO 2005068446	A1	20050728	US 2005-US223	20050105
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZH, ZW, RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GO, GW, ML, MR, NE, SN, TD, TG				
PRIORITY APPLN. INFO.:		US 2004-751353	A	20040105
		US 2004-751354	A	20040105
		US 2004-751387	A	20040105
		US 2004-751388	A	20040105
		US 2004-822639	A	20040412
		US 2004-852730	A	20040524

L17 ANSWER 2 OF 3 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)  
 OTHER SOURCE(S): MARPAT 143:97398  
 IT 856187-95-6  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (preparation of active esters of N-substituted piperazine acetic acids and their labeled derivs.)

RN 856187-95-6 HCAPLUS  
 CN 1-Piperazineacetic acid, 4-methyl-, phenyl ester (9CI) (CA INDEX NAME)



L17 ANSWER 3 OF 3 HCAPLUS COPYRIGHT 2006 ACS on STN  
 ED Entered STN: 08 Jul 2005  
 GI



AB Isotopically enriched N-substituted piperazine-1-acetic acids (I) or salts thereof, comprising one or more heavy atom isotopes [X = O, S; Y = straight chain or branched Cl-6 alkyl or Cl-6 alkyl ether group wherein the carbon atoms of the alkyl group or alkyl ether group each independently comprise linked hydrogen, deuterium or F atoms; Z = independently H, deuterium, F, Cl, Br, iodine, an amino acid side chain, a straight chain or branched Cl-6 alkyl group that may optionally contain a substituted or unsubstituted aryl group (wherein the carbon atoms of the alkyl and aryl groups each independently comprise linked H, deuterium or F atoms), a straight chain or branched Cl-6 alkyl ether group that may optionally contain a substituted or unsubstituted aryl group (wherein the carbon atoms of the alkyl and aryl groups each independently comprise linked H, deuterium or F atoms), or a straight chain or branched Cl-6 alkoxyl group that may optionally contain a substituted or unsubstituted aryl group (wherein the carbon atoms of the alkyl and aryl groups each independently comprise linked H, deuterium or F atoms)] are prepared. N-substituted piperazines can be used as intermediates in the synthesis of N-substituted piperazine acetic acids which in turn can be used as intermediates in the synthesis of active esters of N-substituted piperazine acetic acid. The active esters of N-substituted piperazine acetic acid can be used as labeling reagents to prepare a set of isotopic labeling reagents. The set of isotopic labeling reagents can be used to label analytes such as peptides, proteins, amino acids, oligonucleotides, DNA, RNA, lipids, carbohydrates, steroids, small mols. and the like. Thus, to a stirring solution of 1.18 g (11.83 mmol) N-methylpiperazine in 15 mL toluene at room temperature was added 1 g (5.91 mmol) of Et bromoacetate-1,2-13C dropwise, over a period of 15 min. The reaction mixture was then heated in an oil bath at 90° for 4 h, cooled to room temperature, filtered to remove the off-white solid to give, after workup on the combined filtrate and washings, 1.10 g (quant.) of 4-methylpiperazine-1-acetic acid Et ester-1,2-13C (II) as an off-white oil. II (1.1 g) was refluxed in water for 24 h to give 780 mg 4-methylpiperazine-1-acetic acid-1,2-13C.

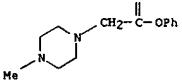
ACCESSION NUMBER: 2005:588426 HCAPLUS  
 DOCUMENT NUMBER: 143:115568  
 TITLE: Preparation of isotopically enriched N-substituted piperazine-1-acetic acids  
 INVENTOR(S): Dey, Subhakar; Pappin, Darryl J. C.; Purkayastha, Subhasish; Pillai, Sasi; Coull, James M.  
 PATENT ASSIGNEE(S): Applera Corp., USA  
 SOURCE: U.S. Pat. Appl. Publ., 29 pp.  
 CODEN: USXXCO  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English

L17 ANSWER 3 OF 3 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)  
 FAMILY ACC. NUM. COUNT: 6  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2005148774	A1	20050707	US 2004-751387	20040105
WO 2005068446	A1	20050728	WO 2005-US223	20050105
V: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DX, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, T2, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
PRIORITY APPLN. INFO.:		US 2004-751353	A 20040105	
		US 2004-751354	A 20040105	
		US 2004-751387	A 20040105	
		US 2004-751388	A 20040105	
		US 2004-822639	A 20040412	
		US 2004-852730	A 20040524	

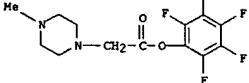
OTHER SOURCE(S): MARPAT 143:115568  
 IT 856187-95-6, 4-Methylpiperazine-1-acetic acid phenyl ester  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (preparation of isotopically enriched N-substituted piperazine-1-acetic acids as isotopic labeling reagents)

RN 856187-95-6 HCAPLUS  
 CN 1-Piperazineacetic acid, 4-methyl-, phenyl ester (9CI) (CA INDEX NAME)



IT 857027-10-2P 857503-00-5P 857503-01-6P  
 857503-03-8P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of isotopically enriched N-substituted piperazine-1-acetic acids as isotopic labeling reagents)

RN 857027-10-2 HCAPLUS  
 CN 1-Piperazineacetic acid, 4-methyl-, pentafluorophenyl ester (9CI) (CA INDEX NAME)



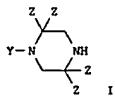
RN 857503-00-5 HCAPLUS

- 10765267Amend

- => s 110  
L18 15 L10

=> d ed abs ibib hitstr 1-15

L18 ANSWER 1 OF 15 HCPLUS COPYRIGHT 2006 ACS on STN  
ED Entered STN: 08 Jul 2005  
GI



**AB** Isotopically enriched N-substituted piperazines (I) or salts thereof, comprising one or more heavy atom isotopes (Y = straight chain or branched Cl-6 alkyl or Cl-6 alkyl ether group wherein the carbon atoms of the alkyl group or alkyl ether group each independently comprise linked hydrogen, deuterium or fluorine atoms; Z = independently H, F, Cl, Br, Iodine, an amino acid side chain, a straight chain or branched Cl-6 alkyl group that may optionally contain a substituted or unsubstituted aryl group wherein the carbon atoms of the alkyl and aryl groups each independently comprise linked H or F atoms, a straight chain or branched Cl-6 alkyl ether group that may optionally contain a substituted or unsubstituted aryl group (wherein the carbon atoms of the alkyl and aryl groups each independently comprise linked hydrogen or fluorine atoms), or a straight chain or branched Cl-6 alkoxy group that may optionally contain a substituted or unsubstituted aryl group wherein the carbon atoms of the alkyl and aryl groups each independently comprise linked hydrogen or fluorine atoms; wherein the N-methylpiperazine is isotopically enriched with either of 13C and/or 15N) are prepared. N-substituted piperazines can be used as intermediates in the synthesis of N-substituted piperazine acetic acids which in turn can be used as intermediates in the synthesis of active esters of N-substituted piperazine acetic acid. The active ester of N-substituted piperazine acetic acid can be used as labeling reagents to prepare a set of isobaric labeling reagents. The set of isobaric labeling reagents can be used to label analytes such as peptides, proteins, amino acids, oligonucleotides, DNA, RNA, lipids, carbohydrates, steroids, small mols. and the like (no data). Thus, to a stirring solution of 1.19 g (11.83 mmol) N-methylpiperazine in 15 mL toluene at room temperature was added 1 g (5.91 mmol) of Et bromoacetate-1,2-13C dropwise, over a period of 15 min. The reaction mixture was then heated in an oil bath at 90° for 4 h, cooled to room temperature, filtered to remove the off-white solid to give, after workup on the combined filtrate and washings, 1.10 g (quant.) of 4-methylpiperazine-1-acetic acid Et ester-1,2-13C (II) as an off-white oil. II (1.1 g) was refluxed in water for 24 h to give 780 mg 4-methylpiperazine-1-acetic acid-1,2-13C.

ACCESSION NUMBER: 2005:592130 HCPLUS

DOCUMENT NUMBER: 143:115574

TITLE: Preparation of isotopically enriched N-substituted piperazines

INVENTOR(S): Pappin, Darryl J. C.; Pillai, Sasi; Coull, James M.

PATENT ASSIGNEE(S): Applica Corp., USA

SOURCE: U.S. Pat. Appl. Publ., 29 pp.

CODEN: USXACO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 6

L18 ANSWER 1 OF 15 HCPLUS COPYRIGHT 2006 ACS on STN (Continued)  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2005148773	A1	20050707	US 2004-751388	20040105
WO 2005068446	A1	20050728	WO 2005-US223	20050105
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				

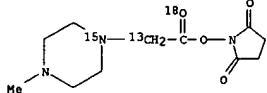
PRIORITY APPLN. INFO.:	US 2004-751353	A 20040105
	US 2004-751354	A 20040105
	US 2004-751387	A 20040105
	US 2004-751388	A 20040105
	US 2004-822639	A 20040412
	US 2004-852730	A 20040524

OTHER SOURCE(S): MARPAT 143:115574

IT 856188-20-0P RL: ARG (Analytical reagent use); SPN (Synthetic preparation); ANST (Analytical study); PREP (Preparation); USES (Uses) (preparation of isotopically enriched N-substituted piperazines as isobaric labeling reagents)

RN 856188-20-0 HCPLUS

CN 2,5-Pyrrolidinedione, 1-[(4-methyl-1-piperazinyl-1-15N)acetyl-2-13C-18O]oxy-, dihydrochloride (9CI) (CA INDEX NAME)



● 2 HCl

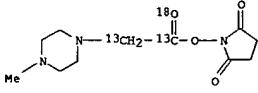
IT 856188-16-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation of isotopically enriched N-substituted piperazines as isobaric labeling reagents)

RN 856188-16-4 HCPLUS

CN 2,5-Pyrrolidinedione, 1-[(4-methyl-1-piperazinyl)acetyl-1-13C2-18O]oxy-, dihydrochloride (9CI) (CA INDEX NAME)

L18 ANSWER 1 OF 15 HCPLUS COPYRIGHT 2006 ACS on STN (Continued)



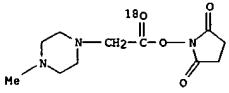
● 2 HCl

IT 856187-87-6P 856188-06-2P 857027-09-9P

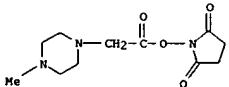
RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of isotopically enriched N-substituted piperazines as isobaric labeling reagents)

RN 856187-87-6 HCPLUS

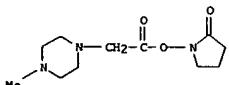
CN 2,5-Pyrrolidinedione, 1-[(4-methyl-1-piperazinyl)acetyl-18O]oxy- (9CI) (CA INDEX NAME)



RN 856188-06-2 HCPLUS  
CN 2,5-Pyrrolidinedione, 1-[(4-methyl-1-piperazinyl)acetyl]oxy- (9CI) (CA INDEX NAME)



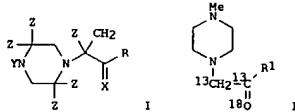
RN 857027-09-9 HCPLUS  
CN 2-Pyrrolidinone, 1-[(4-methyl-1-piperazinyl)acetyl]oxy- (9CI) (CA INDEX NAME)



L18 ANSWER 2 OF 15 HCPLUS COPYRIGHT 2006 ACS on STN

ED Entered STN: 08 Jul 2005

GI



**AB** In some embodiments, this invention pertains to active esters of N-substituted piperazine acetic acid I (R = leaving group; X = O, S; Y = Cl-C6 alkyl, Cl-C6 alkyl ether; Z = H, 2H, F, Cl, Br, iodide, amino acid side chain, Cl-C6 alkyl, Cl-C6 alkyl ether), including isotopically enriched versions thereof. In some embodiments, this invention pertains to methods for the preparation of active esters of N-substituted piperazine acetic acid, including isotopically enriched versions thereof. For example, the isotopically labeled N-methylpiperazine II (R1 = 18OH) reacted with the trifluoroacetic acid ester of N-hydroxysuccinimido to give the succinate II (R1 = OR2, R2 = succinimido).

ACCESSION NUMBER: 2005:592129 HCPLUS

DOCUMENT NUMBER: 143:97398

TITLE: Preparation of active esters of N-substituted piperazine acetic acids, including isotopically enriched versions

INVENTOR(S): Dey, Subhakar; Pappin, Darryl J. C.; Purkayastha, Subhashish; Pillai, Sasi; Coull, James M.

PATENT ASSIGNEE(S): Applica Corp., USA

SOURCE: U.S. Pat. Appl. Publ., 33 pp.

CODEN: USXKC0

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 6

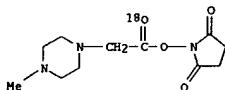
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2005148771	A1	20050707	US 2004-751354	20040105
WO 2005068446	A1	20050728	WO 2005-US223	20050105
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				

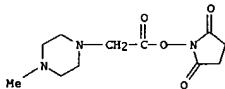
PRIORITY APPLN. INFO.:	US 2004-751353	A 20040105
	US 2004-751354	A 20040105
	US 2004-751387	A 20040105
	US 2004-751388	A 20040105
	US 2004-822639	A 20040412
	US 2004-852730	A 20040524

OTHER SOURCE(S): MARPAT 143:97398

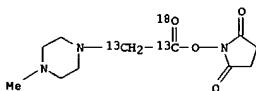
L18 ANSWER 2 OF 15 HCPLUS COPYRIGHT 2006 ACS on STN (Continued)  
IT 856187-87-6P 856188-06-2P 856188-16-4P  
RL: IMP (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)  
(Preparation)  
(preparation of active esters of N-substituted piperazine acetic acids and their labeled derivs.)  
RN 856187-87-6 HCPLUS  
CN 2,5-Pyrrolidinedione, 1-[(4-methyl-1-piperazinyl)acetyl-18O]oxy)- (9CI) (CA INDEX NAME)



RN 856188-06-2 HCPLUS  
CN 2,5-Pyrrolidinedione, 1-[(4-methyl-1-piperazinyl)acetyl]oxy)- (9CI) (CA INDEX NAME)



RN 856188-16-4 HCPLUS  
CN 2,5-Pyrrolidinedione, 1-[(4-methyl-1-piperazinyl)acetyl-13C2-18O]oxy)-, dihydrochloride (9CI) (CA INDEX NAME)



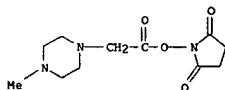
●2 HCl

RN 856188-20-0 HCPLUS  
CN 2,5-Pyrrolidinedione, 1-[(4-methyl-1-piperazinyl-1-15N)acetyl-2-13C-18O]oxy)-, dihydrochloride (9CI) (CA INDEX NAME)

L18 ANSWER 3 OF 15 HCPLUS COPYRIGHT 2006 ACS on STN  
ED Entered STN: 08 Jul 2005  
AB This invention pertains to mixts. of isobarically labeled analytes and fragment ions thereof.  
ACCESSION NUMBER: 2005:592027 HCPLUS  
DOCUMENT NUMBER: 143:93642  
TITLE: Mixtures of isobarically labeled analytes and fragments ions derived therefrom  
INVENTOR(S): Pappin, Darryl J. C.; Purkayastha, Subhasish; Coull, James M.  
PATENT ASSIGNEE(S): Applera Corp., USA  
SOURCE: U.S. Pat. Appl. Publ., 36 pp., Cont.-in-part of U.S. Ser. No. 751,353.  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 6  
PATENT INFORMATION:

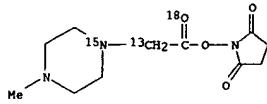
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2005147985	A1	20050707	US 2004-822639	20040412
US 2005147982	A1	20050707	US 2004-751353	200404105
US 2005148087	A1	20050707	US 2004-852730	20040524
WO 2005068446	A1	20050728	WO 2005-US223	20050105
W: AE, AG, AL, AM, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LX, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UC, UZ, VC, VN, YU, ZA, ZM, ZW, RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
PRIORITY APPLN. INFO.:		US 2004-751353	A2 20040105	
		US 2004-751354	A 20040105	
		US 2004-751387	A 20040105	
		US 2004-751388	A 20040105	
		US 2004-822639	A2 20040412	
		US 2004-852730	A 20040524	

OTHER SOURCE(S): MARPAT 143:93642  
IT 856188-06-2P 857027-09-9P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(mixts. of isobarically labeled analytes and fragments ions derived therefrom)  
RN 856188-06-2 HCPLUS  
CN 2,5-Pyrrolidinedione, 1-[(4-methyl-1-piperazinyl)acetyl]oxy)- (9CI) (CA INDEX NAME)



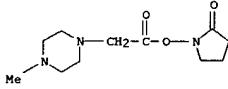
RN 857027-09-9 HCPLUS

L18 ANSWER 2 OF 15 HCPLUS COPYRIGHT 2006 ACS on STN (Continued)

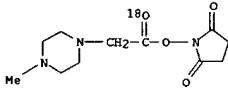


●2 HCl

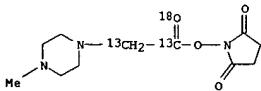
L18 ANSWER 3 OF 15 HCPLUS COPYRIGHT 2006 ACS on STN (Continued)  
CN 2-Pyrrolidinone, 1-[(4-methyl-1-piperazinyl)acetyl]oxy)- (9CI) (CA INDEX NAME)



IT 856187-87-6P 856188-16-4P 856188-20-0P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(mixts. of isobarically labeled analytes and fragments ions derived therefrom)  
RN 856187-87-6 HCPLUS  
CN 2,5-Pyrrolidinedione, 1-[(4-methyl-1-piperazinyl)acetyl-18O]oxy)- (9CI) (CA INDEX NAME)

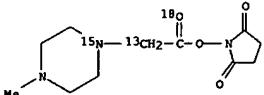


RN 856188-16-4 HCPLUS  
CN 2,5-Pyrrolidinedione, 1-[(4-methyl-1-piperazinyl)acetyl-13C2-18O]oxy)-, dihydrochloride (9CI) (CA INDEX NAME)

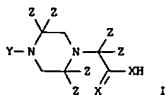


●2 HCl

RN 856188-20-0 HCPLUS  
CN 2,5-Pyrrolidinedione, 1-[(4-methyl-1-piperazinyl-1-15N)acetyl-2-13C-18O]oxy)-, dihydrochloride (9CI) (CA INDEX NAME)



●2 HCl



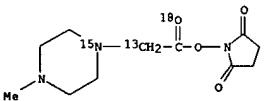
**A8** Isotopically enriched N-substituted piperazine-1-acetic acids (I) or salts thereof, comprising one or more heavy atom isotopes [X = O, S; Y = straight chain or branched C1-6 alkyl or C1-6 alkyl ether group wherein the carbon atoms of the alkyl group or alkyl ether group each independently comprise linked hydrogen, deuterium or F atoms; Z = independently H, deuterium, F, Cl, Br, iodine, an amino acid side chain, a straight chain or branched C1-6 alkyl group that may optionally contain a substituted or unsubstituted aryl group (wherein the carbon atoms of the alkyl and aryl groups each independently comprise linked H, deuterium or F atoms), a straight chain or branched C1-6 alkyl ether group that may optionally contain a substituted or unsubstituted aryl group (wherein the carbon atoms of the alkyl and aryl groups each independently comprise linked H, deuterium or F atoms), or a straight chain or branched C1-6 alkyl group wherein the carbon atoms of the alkyl and aryl groups each independently comprise linked hydrogen, deuterium or F atoms, or a straight chain or branched C1-6 alkoxy group that may optionally contain a substituted or unsubstituted aryl group (wherein the carbon atoms of the alkyl and aryl groups each independently comprise linked H, deuterium or F atoms)] are prepared. N-substituted piperazines can be used as intermediates in the synthesis of N-substituted piperazine acetic acids which in turn can be used as intermediates in the synthesis of active esters of N-substituted piperazine acetic acid. The active esters of N-substituted piperazine acetic acid can be used as labeling reagents to prepare a set of isobaric labeling reagents. The set of isobaric labeling reagents can be used to label analytes such as peptides, proteins, amino acids, oligonucleotides, DNA, RNA, lipids, carbohydrates, steroids, small mols. and the like. Thus, to a stirring solution of 1.18 g (11.83 mmol) N-methylpiperazine in 15 mL toluene at room temperature was added 1 g (5.91 mmol) of Et bromoacetate-1,2-13C dropwise, over a period of 15 min. The reaction mixture was then heated in an oil bath at 90° for 4 h, cooled to room temperature, filtered to remove the off-white solid to give, after workup on the combined filtrate and washings, 1.10 g (quant.) of 4-methylpiperazine-1-acetic acid Et ester-1,2-13C (II) as an off-white oil. II (1.1 g) was refluxed in water for 24 h to give 780 mg 4-methylpiperazine-1-acetic acid-1,2-13C.

ACCESSION NUMBER: 2005:588426 HCPLUS  
DOCUMENT NUMBER: 143:115568  
TITLE: Preparation of isotopically enriched N-substituted piperazine-1-acetic acids  
INVENTOR(S): Dey, Subhakari; Pappin, Darryl J. c.; Purkayastha, Subhasish; Pillai, Sasi; Coull, James M.  
PATENT ASSIGNEE(S): Applera Corp., USA  
SOURCE: U.S. Pat. Appl. Publ., 29 pp.  
DOCUMENT TYPE: Patent  
LANGUAGE: English

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2005148774	A1	20050707	US 2004-751387	20040105
WO 2005068446	A1	20050728	WO 2005-US223	20050105
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
PRIORITY APPLN. INFO.:		US 2004-751353	A 20040105	
		US 2004-751354	A 20040105	
		US 2004-751387	A 20040105	
		US 2004-751388	A 20040105	
		US 2004-822639	A 20040412	
		US 2004-852730	A 20040524	

OTHER SOURCE(S): MARPAT 143:115568  
IT 856188-20-0P  
RL: ARG (Analytical reagent use); SPN (Synthetic preparation); ANST (Analytical study); PREP (Preparation); USES (Uses) (preparation of isotopically enriched N-substituted piperazine-1-acetic acids as isobaric labeling reagents)

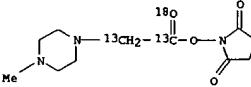
RN 856188-20-0 HCPLUS  
CN 2,5-Pyrrolidinedione, 1-[[{(4-methyl-1-piperazinyl-1-15N)acetyl}-2-13C-18O]oxy]-, dihydrochloride (9CI) (CA INDEX NAME)



●2 HCl

IT 856188-16-4P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation of isotopically enriched N-substituted piperazine-1-acetic acids as isobaric labeling reagents)

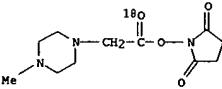
RN 856188-16-4 HCPLUS  
CN 2,5-Pyrrolidinedione, 1-[[{(4-methyl-1-piperazinyl)acetyl}-13C2-18O]oxy]-, dihydrochloride (9CI) (CA INDEX NAME)



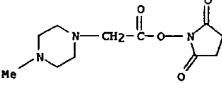
●2 HCl

IT 856188-87-6P 856188-06-2P 857027-09-9P  
RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of isotopically enriched N-substituted piperazine-1-acetic acids as isobaric labeling reagents)

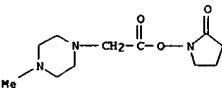
RN 856187-87-6 HCPLUS  
CN 2,5-Pyrrolidinedione, 1-[(4-methyl-1-piperazinyl)acetyl]-18O]oxy)- (9CI) (CA INDEX NAME)



RN 856188-06-2 HCPLUS  
CN 2,5-Pyrrolidinedione, 1-[(4-methyl-1-piperazinyl)acetyl]oxy)- (9CI) (CA INDEX NAME)



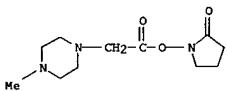
RN 857027-09-9 HCPLUS  
CN 2-Pyrrolidinone, 1-[(4-methyl-1-piperazinyl)acetyl]oxy)- (9CI) (CA INDEX NAME)



L18 ANSWER 5 OF 15 HCAPLUS COPYRIGHT 2006 ACS on STN  
 ED Entered STN: 08 Jul 2005  
 AB This invention pertains to isobarically labeled analytes and fragment ions thereof.  
 ACCESSION NUMBER: 2005:588349 HCAPLUS  
 DOCUMENT NUMBER: 143:112150  
 TITLE: Isobarically labeled analytes and fragment ions derived therefrom  
 INVENTOR(S): Pappin, Darryl J. C.; Purkayastha, Subhasish; Coull, James M.  
 PATENT ASSIGNEE(S): Applera Corporation, USA  
 SOURCE: U.S. Pat. Appl. Publ., 88 pp., Cont.-in-part of U.S. Ser. No. 822,639.  
 CODEN: USXKCO  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 6  
 PRIORITY INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2005149087	A1	20050707	US 2004-852730	20040524
US 2005147982	A1	20050707	US 2004-751353	20040105
US 2005147985	A1	20050707	US 2004-822639	20040412
WO 2005068446	A1	20050728	WO 2005-US223	20050105
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
PRIORITY APPLN. INFO.:		US 2004-751353	A2 20040105	
		US 2004-822639	A2 20040412	
		US 2004-751354	A 20040105	
		US 2004-751387	A 20040105	
		US 2004-751388	A 20040105	
		US 2004-852730	A 20040524	

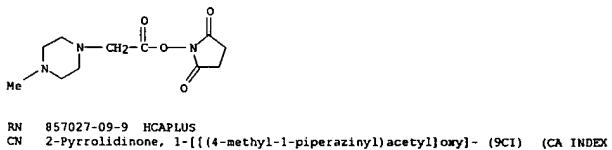
OTHER SOURCE(S): MARPAT 143:112150  
 IT 857027-09-9P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (isobarically labeled analytes and fragment ions derived therefrom)  
 RN 857027-09-9 HCAPLUS  
 CN 2-Pyrrolidinedione, 1-[(4-methyl-1-piperazinyl)acetyl]oxy]- (9CI) (CA INDEX NAME)



L18 ANSWER 6 OF 15 HCAPLUS COPYRIGHT 2006 ACS on STN  
 ED Entered STN: 08 Jul 2005  
 AB This invention pertains to mixts. of isobarically labeled analytes and fragment ions thereof.  
 ACCESSION NUMBER: 2005:588336 HCAPLUS  
 DOCUMENT NUMBER: 143:93635  
 TITLE: Mixtures of isobarically labeled analytes and fragments ions derived therefrom  
 INVENTOR(S): Pappin, Darryl J. C.; Purkayastha, Subhasish; Coull, James M.  
 PATENT ASSIGNEE(S): Applera Corporation, USA  
 SOURCE: U.S. Pat. Appl. Publ., 29 pp.  
 CODEN: USXKCO  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 6  
 PRIORITY INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2005147982	A1	20050707	US 2004-751353	20040105
US 2005147985	A1	20050707	US 2004-822639	20040412
US 2005149087	A1	20050707	US 2004-852730	20040524
WO 2005068446	A1	20050728	WO 2005-US223	20050105
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
PRIORITY APPLN. INFO.:		US 2004-751353	A2 20040105	
		US 2004-751354	A 20040105	
		US 2004-751387	A 20040105	
		US 2004-751388	A 20040105	
		US 2004-822639	A2 20040412	
		US 2004-852730	A 20040524	

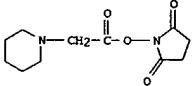
IT 856188-06-2P 857027-09-9P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (mixts. of isobarically labeled analytes and fragments ions derived therefrom)  
 RN 856188-06-2 HCAPLUS  
 CN 2,5-Pyrrolidinedione, 1-[(4-methyl-1-piperazinyl)acetyl]oxy]- (9CI) (CA INDEX NAME)



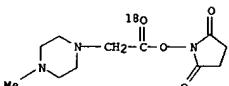
RN 857027-09-9 HCAPLUS  
 CN 2-Pyrrolidinedione, 1-[(4-methyl-1-piperazinyl)acetyl]oxy]- (9CI) (CA INDEX NAME)

L18 ANSWER 5 OF 15 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)

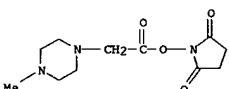
IT 741683-79-4P 856187-07-6P 856188-06-2P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (isobarically labeled analytes and fragment ions derived therefrom)  
 RN 741683-79-4 HCAPLUS  
 CN 2,5-Pyrrolidinedione, 1-[(1-piperidinylacetyl)oxy]- (9CI) (CA INDEX NAME)



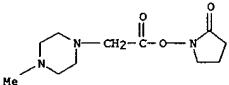
RN 856187-07-6 HCAPLUS  
 CN 2,5-Pyrrolidinedione, 1-[(1-piperidinylacetyl)oxy]- (9CI) (CA INDEX NAME)



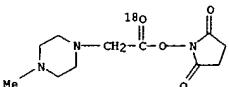
RN 856188-06-2 HCAPLUS  
 CN 2,5-Pyrrolidinedione, 1-[(1-piperidinylacetyl)oxy]- (9CI) (CA INDEX NAME)



L18 ANSWER 6 OF 15 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)



IT 856187-07-6P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (mixts. of isobarically labeled analytes and fragments ions derived therefrom)  
 RN 856187-07-6 HCAPLUS  
 CN 2,5-Pyrrolidinedione, 1-[(4-methyl-1-piperazinyl)acetyl]oxy]- (9CI) (CA INDEX NAME)



L18 ANSWER 7 OF 15 HCPLUS COPYRIGHT 2006 ACS on STN

ED Entered STN: 16 May 2005

AB Glycerophosphoethanolamine (GPEtn) and glycerophosphoserine (GPSer) lipids were reacted with a multiplexed set of differentially isotopically enriched N-methylpiperazine acetic acid N-hydroxysuccinimide ester reagents, which place isobaric mass labels at a primary amino group. The resulting derivitized aminophospholipids were isobaric and chromatog. indistinguishable but yielded pos. reporter ions ( $m/z$  114 or 117) after collisional activation that could be used to identify and quantify individual members of the multiplex set. The chromatog. and mass spectrometric response of N-methylpiperazine amide-tagged aminophospholipids was probed using glycerophosphoethanolamine and glycerophosphoserine lipid stds. The  $[M+H]^+$  of each tagged aminophospholipid shifted 144 Da, and during collision-induced dissociation the major fragmentation ion was either  $m/z$  114 or 117. This mode of detecting aminophospholipids was useful for an unbiased anal. of plasmalogen GPEtn lipids. Mol. species information on the esterified fatty acyl substituents was obtained by collisional activation of the  $[M+H]^+$  ions. The isotope-tagged reagents were used to assess changes in the distribution of GPEtn lipids after exposure of liposomes made from phospholipids extracted from RAW 264.7 cells to Cu<sup>2+</sup>/H2O2 to illustrate the ability of these reagents to aid in the mass spectrometric identification of aminophospholipid changes that occur during biol. stimuli.

ACCESSION NUMBER: 2005412987 HCPLUS

DOCUMENT NUMBER: 144186804

TITLE: Analysis of cell membrane aminophospholipids as isotope-tagged derivatives

AUTHOR(S): Zemski Berry, Karin A.; Murphy, Robert C.

CORPORATE SOURCE: Department of Pharmacology, University of Colorado Health Sciences Center, Aurora, CO, 80045, USA

SOURCE: Journal of Lipid Research (2005), 46(5), 1038-1046

CODEN: JLRWAW; ISSN: 0022-2275

PUBLISHER: American Society for Biochemistry and Molecular Biology, Inc.

DOCUMENT TYPE: Journal

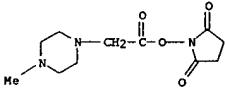
LANGUAGE: English

IT 856188-06-2

RL: RCT (Reactant); RACT (Reactant or reagent)  
(preparation and mass spectrometric anal. of cell membrane aminophospholipids as isotope-tagged derivs.)

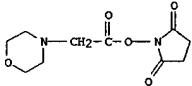
RN 856188-06-2 HCPLUS

CN 2,5-Pyrrolidinedione, 1-[(4-methyl-1-piperazinyl)acetyl]oxy]- (9CI) (CA INDEX NAME)



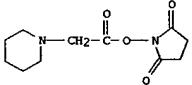
REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L18 ANSWER 8 OF 15 HCPLUS COPYRIGHT 2006 ACS on STN (Continued)



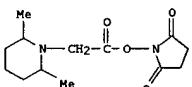
RN 741683-79-4 HCPLUS

CN 2,5-Pyrrolidinedione, 1-[(1-piperidinylacetyl)oxy]- (9CI) (CA INDEX NAME)



RN 769385-34-8 HCPLUS

CN 2,5-Pyrrolidinedione, 1-[(2,6-dimethyl-1-piperidinyl)acetyl]oxy]- (9CI) (CA INDEX NAME)



IT 741683-76-1P 741683-79-4P 769385-34-8P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(mass labels)  
RN 741683-76-1 HCPLUS  
CN 2,5-Pyrrolidinedione, 1-[(4-morpholinylacetyl)oxy]- (9CI) (CA INDEX NAME)

L18 ANSWER 8 OF 15 HCPLUS COPYRIGHT 2006 ACS on STN

ED Entered STN: 08 Oct 2004

AB Provided is a method for characterizing a mol. by mass spectrometry, which mol. comprises one or more free amino groups, which method comprises: (a) reacting one or more free amino groups in the mol. with a mass tag reagent comprising a reactive functionality capable of reacting with an amino group, and a tertiary amino group linked to the reactive functionality; and (b) characterizing the mol. by mass spectrometry.

ACCESSION NUMBER: 20040824132 HCPLUS

DOCUMENT NUMBER: 141310231

TITLE: Mass labels

INVENTOR(S): Hamon, Christian; Kuhn, Karsten; Thompson, Andrew; Reuschling, Dieter; Schaefer, Juergen

PATENT ASSIGNEE(S): Xillion G.m.b.H. &amp; Co. K.-G., Germany; Proteome Sciences PLC

SOURCE: PCT Int. Appl., 63 pp.

CODEN: PIXX02

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

WO 2004086050 A2 20041007 WO 2004-GB1167 20040318

WO 2004086050 A3 20041229

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SI, SY, TJ, TM, TN, TR, TT, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW  
RW: BW, GH, KE, LS, MW, MZ, SD, SL, SZ, T2, US, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

CA 2520297 AA 20041007 CA 2004-2520297 20040318

EP 1606623 A2 20051221 EP 2004-721565 20040318

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK  
NO 2005004684 A 20051012 NO 2005-4684 20051012

PRIORITY APPLN. INFO.: GB 2003-6756 A 20030324  
WO 2004-GB1167 W 20040318

IT 741683-76-1P 741683-79-4P 769385-34-8P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(mass labels)

RN 741683-76-1 HCPLUS

CN 2,5-Pyrrolidinedione, 1-[(4-morpholinylacetyl)oxy]- (9CI) (CA INDEX NAME)

L18 ANSWER 9 OF 15 HCPLUS COPYRIGHT 2006 ACS on STN

ED Entered STN: 20 Aug 2004

AB This invention pertains to methods, mixts., kits and/or compns. for the determination of analytes by mass anal. using unique labeling reagents or sets of unique labeling reagents. The labeling reagents can be isomeric or isobaric and can be used to produce mixts. suitable for multiplex anal. of the labeled analytes.

ACCESSION NUMBER: 2004081717 HCPLUS

DOCUMENT NUMBER: 141202794

TITLE: Methods, mixtures, kits and compositions pertaining to analyte determination

INVENTOR(S): Pappin, Darryl J. C.; Bartlett-Jones, Michael

PATENT ASSIGNEE(S): Applera Corporation, USA

SOURCE: PCT Int. Appl., 105 pp.

CODEN: PIXX02

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

WO 2004070352 A2 20040819 WO 2004-US2077 20040127

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SI, SY, TJ, TM, TN, TR, TT, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW  
RW: BW, GH, KE, LS, MW, MZ, SD, SL, SZ, T2, US, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

CA 2498584 AA 20040819 CA 2004-2498584 20040127

US 2004219685 A1 20041104 US 2004-765264 20040127

US 2004220412 A1 20041104 US 2004-765267 20040127

US 2004219686 A1 20041104 US 2004-763458 20040127

EP 1588145 A2 20051026 EP 2004-705571 20040127

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK  
PRIORITY APPLN. INFO.: US 2003-443612P P 20030130  
WO 2004-US2077 W 20040127

IT 741683-76-1P 741683-77-2P 741683-78-3P

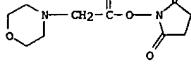
741683-79-4P 741683-80-7P 741683-86-3P

741683-93-2P

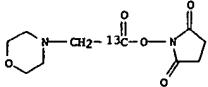
RL: SPN (Synthetic preparation); PREP (Preparation)  
(methods, mixts., kits and compns. pertaining to analyte determination)

RN 741683-76-1 HCPLUS

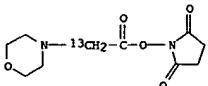
CN 2,5-Pyrrolidinedione, 1-[(4-morpholinylacetyl)oxy]- (9CI) (CA INDEX NAME)



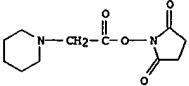
RN 741683-77-2 HCPLUS  
CN 2,5-Pyrrolidinedione, 1-[(4-morpholinylacetyl-1-13C)oxy]- (9CI) (CA INDEX NAME)



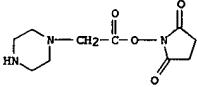
RN 741683-78-3 HCPLUS  
CN 2,5-Pyrrolidinedione, 1-[(4-morpholinylacetyl-2-13C)oxy]- (9CI) (CA INDEX NAME)



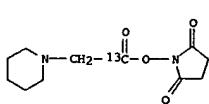
RN 741683-79-4 HCPLUS  
CN 2,5-Pyrrolidinedione, 1-[(1-piperidinylacetyl)oxy]- (9CI) (CA INDEX NAME)



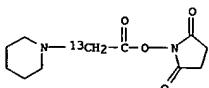
RN 741683-80-7 HCPLUS  
CN 2,5-Pyrrolidinedione, 1-[(1-piperazinylacetyl)oxy]- (9CI) (CA INDEX NAME)



RN 741683-86-3 HCPLUS  
CN 2,5-Pyrrolidinedione, 1-[(1-piperidinylacetyl-1-13C)oxy]- (9CI) (CA INDEX NAME)



RN 741683-93-2 HCPLUS  
CN 2,5-Pyrrolidinedione, 1-[(1-piperidinylacetyl-2-13C)oxy]- (9CI) (CA INDEX NAME)

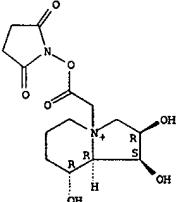


L18 ANSWER 10 OF 15 HCPLUS COPYRIGHT 2006 ACS on STN  
ED Entered STN: 17 May 2004  
AB The process comprises N-alkylating sainsonine with bromoacetic acid N-succinimido ester in acetone under refluxing, coupling with bovine serum albumin in water at 0 °C, dialyzing, freeze drying, and emulsifying with Freund's adjuvant.

ACCESSION NUMBER: 2004:399339 HCPLUS  
DOCUMENT NUMBER: 141:254556  
TITLE: Grassland's locoweed toxin vaccine  
INVENTOR(S): Dong, Dewen; Cao, Guangrong; Zhao, Baoyu; Ge, Pengbin  
PATENT ASSIGNEE(S): Danong Biotechnology Co., Ltd., Yangling, Peop. Rep. China  
SOURCE: Faming Zhanli Shengqing Gongkai Shuomingshu, 17 pp.  
DOCUMENT TYPE: Patent  
LANGUAGE: Chinese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

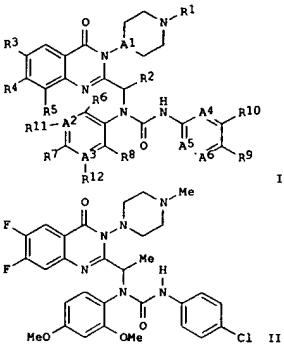
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 1395967	A	20030212	CN 2002-114592	20020524
PRIVITY APPLN. INFO.:			CN 2002-114592	20020524
IT 754196-04-8P	RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (vaccine for Grassland's locoweed toxin)			
RN 754196-04-8 HCPLUS				
CN Indolizinium, 4-[2-((2,5-dioxo-1-pyrrolidinyl)oxy)-2-oxoethyl]octahydro-1,2,8-trihydroxy-, bromide, (1S,2R,8R,8aR)- (9CI) (CA INDEX NAME)				

Absolute stereochemistry.



● Br<sup>-</sup>

L18 ANSWER 11 OF 15 HCPLUS COPYRIGHT 2006 ACS on STN  
ED Entered STN: 28 Nov 2003  
GI



AB This invention relates to compds. of formula I [A1-A6 = C, N; R1 = H, alkyl, cycloalkyl, CH<sub>2</sub>-cycloalkyl, etc.; R2 = alkyl; R3-R12 = H, alkyl, CF<sub>3</sub>, alkoy, halo, OH, CN, etc.] that are efflux pump inhibitors and therefore are useful as potentiators of anti-fungal agents for the treatment of infections caused by fungi that employ an efflux pump resistance mechanism. Thus, II was prepared and showed a reduced MIC value against Candida albicans in the presence of fluconazole.

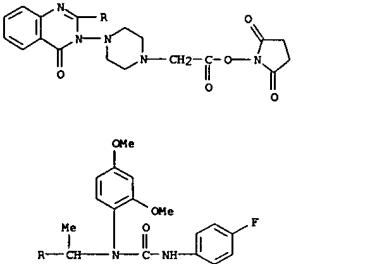
ACCESSION NUMBER: 2003:930975 HCPLUS  
DOCUMENT NUMBER: 139:395945  
TITLE: Preparation of quinazolinylmethyl urea derivatives as fungal efflux pump inhibitors  
INVENTOR(S): Watkins, Will J.; Lemoinne, Remy; Cho, Aesop; Palme, Monica  
PATENT ASSIGNEE(S): USA  
SOURCE: U.S. Pat. Appl. Publ., 109 pp., Cont.-in-part of U.S. Ser. No. 906,864.  
CODEN: USXXCO  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 3  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 200320338	A1	20031127	US 2002-243074	20020912
US 6596723	B1	20030722	US 2001-906864	20010716
US 2003229097	A1	20031211	US 2002-334755	20021230
US 6689782	B2	20040210		
WO 2004024140	A1	20040325	WO 2003-US5184	20030221
			W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,	

L18 ANSWER 11 OF 15 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)  
 GM, HR, RU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,  
 LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MZ, NO, NZ, OM, PH,  
 PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ,  
 RW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,  
 KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,  
 FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF,  
 BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG  
 AU 2003215343 A1 20040430 AU 2003-215343 20030221  
 PRIORITY APPLN. INFO.: US 2001-906864 A2 20010716  
 US 2002-243074 A2 20020912  
 US 2002-334755 A 20021230  
 WO 2003-US5184 W 20030221

OTHER SOURCE(S): MARPAT 139:39545

IT 626245-8P RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation of quinazolinylmethyl urea derivs. as fungal efflux pump inhibitors)  
 RN 626245-59-8 HCAPLUS  
 CN Urea, N-(2,4-dimethoxyphenyl)-N-[1-{3-[4-{2-[(2,5-dioxo-1-pyrrolidinyl)oxy]-2-oxoethyl}-1-piperazinyl]-3,4-dihydro-4-oxo-quinazolinyl}ethyl]-N'-(4-fluorophenyl)- (9CI) (CA INDEX NAME)

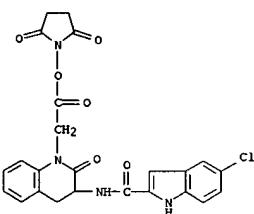


L18 ANSWER 12 OF 15 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)

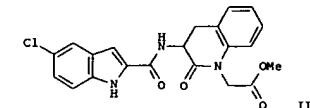
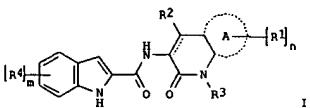
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,  
 FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,  
 BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG  
 AU 2003216991 A1 20030916 AU 2003-216991 20030304  
 EP 1495371 A2 20041215 EP 2003-712313 20030304  
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK  
 US 2005131016 A1 20050616 US 2003-506748 20030304  
 JP 2005525364 T2 20050825 JP 2003-572981 20030304  
 PRIORITY APPLN. INFO.: GB 2002-5162 A 20020306  
 WO 2003-GB893 W 20030304

OTHER SOURCE(S): MARPAT 139:261174

IT 599193-13-2P RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation of N-heterocycl indole-2-carboxamides as glycogen phosphorylase inhibitors)  
 RN 599193-13-2 HCAPLUS  
 CN 1H-Indole-2-carboxamide, 5-chloro-N-[1-{2-[(2,5-dioxo-1-pyrrolidinyl)oxy]-2-oxoethyl}-1,2,3,4-tetrahydro-2-oxo-3-quinolinyl]- (9CI) (CA INDEX NAME)



L18 ANSWER 12 OF 15 HCAPLUS COPYRIGHT 2006 ACS on STN  
 ED Entered STN: 14 Sep 2003  
 GI

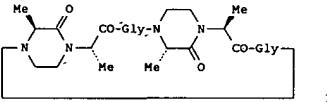


AB The title compds. [I: A = phenylene or heteroarylene; m = 0-2; n = 0-2; R1 = halo, NO2, CN, OH, CO2H, etc.; R2 = H, OH, CO2H; R3 = H, OH, aryl, heterocycl, etc.; R4 = H, halo, NO2, CN, etc.] which possess glycogen phosphorylase inhibitory activity and accordingly have value in the treatment of disease states associated with increased glycogen phosphorylase activity such as diabetes type II, were prepared. Thus, amidation of 5-chloro-1H-indole-2-carboxylic acid with Me 2-(3-amino-2-oxo-3,4-dihydroquinolin-1-(2H)-yl)acetate (preparation given) in the presence of HOBT, DCM and EDCI afforded 59% II. The compds. I showed IC50 values in the range 100μM to 1mM against hrl glycogen phosphorylase a. Pharmaceutical composition comprising the compound I was claimed.

ACCESSION NUMBER: 2003-719471 HCAPLUS  
 DOCUMENT NUMBER: 139:261174  
 TITLE: Preparation of N-heterocycl indole-2-carboxamides as glycogen phosphorylase inhibitors  
 INVENTOR(S): Birch, Alan Martin; Morley, Andrew David  
 PATENT ASSIGNEE(S): AstraZeneca AB, Swed.; AstraZeneca UK Limited  
 SOURCE: PCT Int. Appl., 86 pp.  
 CODEN: PIXKD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003074513	A2	20030912	WO 2003-GB893	20030304
WO 2003074513	A3	20031231		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, RW				

L18 ANSWER 13 OF 15 HCAPLUS COPYRIGHT 2006 ACS on STN  
 ED Entered STN: 21 Mar 1995  
 GI

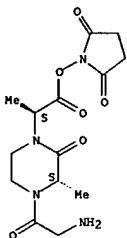


AB The crystal structure of 18-membered cyclic pseudopeptide I, containing N,N'-ethylene-bridged-(S)-alanyl-(S)-alanine and glycine was determined by X-ray crystallogr. Moreover, the structure of this pseudopeptide was examined in 1H NMR measurement in CD3CN, and by mol. mechanics calcs.

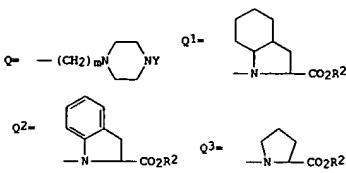
ACCESSION NUMBER: 1995-427460 HCAPLUS  
 DOCUMENT NUMBER: 123:83982  
 TITLE: Structure of cyclic hexa-pseudopeptide constructed from N,N'-ethylene-bridged-(S)-alanyl-(S)-alanine and glycine  
 AUTHOR(S): Kojima, Yoshitane; Yamashita, Tetsushi; Miyake, Hiroyuki  
 CORPORATE SOURCE: Fac. Sci., Osaka City Univ., Osaka, 558, Japan  
 SOURCE: Chemistry Letters (1995), (3), 201-2  
 CODEN: CHELTG; ISSN: 0366-7022  
 PUBLISHER: Nippon Kagakai  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English

IT 164857-03-8  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (structure of cyclic hexapeptide constructed from ethylene-bridged alanylalanine and glycine)  
 RN 164857-03-9 HCAPLUS  
 CN Piperazinone, 4-(aminoacetyl)-1-[2-[(2,5-dioxo-1-pyrrolidinyl)oxy]-1-methyl-2-oxoethyl]-3-methyl-, monohydrochloride, {S-(R\*,R\*)}- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



● HCl



**AB** RR<sub>1</sub>CHCONHCH(CO<sub>2</sub>R<sub>2</sub>)(CH<sub>2</sub>)<sub>2</sub>COR<sub>3</sub> [I; R = H, lower alkyl, PhCH<sub>2</sub>; R<sub>1</sub> = (NH)<sub>m</sub>(CH<sub>2</sub>)<sub>n</sub>, Q; R<sub>2</sub> = H, lower alkyl; R<sub>3</sub> = Q<sub>1</sub>, Q<sub>2</sub>, Q<sub>3</sub>, NR<sub>4</sub>CH<sub>2</sub>CO<sub>2</sub>R<sub>2</sub>; W = H, CO<sub>2</sub>H, NH<sub>2</sub>, OH; Y = H, lower alkyl, Ph, PhCH<sub>2</sub>; R<sub>4</sub> = C<sub>4</sub>-8 cycloalkyl, halo, alkoxy, (OH-substituted) Ph; m = 0, 1; n = 0-4] and their salts are prepared. Refluxing 28 g 2-(S)-bromopropionic acid with 42 g PhCH<sub>2</sub>OH in PhMe gave 17.0 g benzyl 2-(S)-bromopropionate, 2.2 g of which was stirred with 1.6 g 1-benzylpiperazine in MeCN, then hydrolyzed with aqueous NaOH to give 1.0 g 2-(R)-(4-benzylpiperazinyl)propionic acid (II). Then, 24.5 g N-benzyloxycarbonyl-1-ethyl-D-glutamic acid was stirred with 17.5 g Et (2S, 3aS, 7aS)-octahydro-1H-indole-2-carboxylate-HCl in CH<sub>2</sub>Cl<sub>2</sub>, then reduced, and then hydrolyzed with aqueous NaOH to give 15.01 g (2S, 3aS, 7aS)-1-(y-D-glutamyl)octahydro-1H-indole-2-carboxylic acid (III). Then, 0.8 g II was treated with 0.4 g N-hydroxysuccinimide in CHCl<sub>3</sub> to give 2-(R)-(4-benzylpiperazinyl)propionic acid N-hydroxysuccinimide ester, which was treated with 1.0 g III in THF to give 0.8 g (2S, 3aS, 7aS)-1-(N-2(R)-(4-benzylpiperazinyl)propionyl)-y-D-glutamyl)octahydro-1H-indole-2-carboxylic acid, 0.4 g of which was refluxed with HCO<sub>2</sub>H in MeOH in the presence of Pd black for 4 h to give 0.2 g (2S, 3aS, 7aS)-1-[N-(2(R)-piperazinylpropionyl)-y-D-glutamyl]octahydro-1H-indole-2-carboxylic acid, which showed an IC<sub>50</sub> of 2.1 + 10-7 M against angiotensin converting enzyme.

ACCESSION NUMBER: 1990:7937 HCAPLUS  
DOCUMENT NUMBER: 112:7937  
TITLE: Preparation and testing of tripeptide derivatives as cardiovascular agents  
INVENTOR(S): Sawayama, Tadahiro; Nishimura, Kazuya; Deguchi, Takashi  
PATENT ASSIGNEE(S): Dainippon Pharmaceutical Co., Ltd., Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.  
CODEN: JPOXKAF

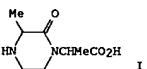
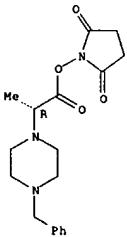
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 01125357	A2	19890517	JP 1987-281873	19871106
PRIORITY APPLN. INFO.:			JP 1987-281873	19871106

IT 124078-64-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(preparation and condensation of, with (glutamyl)indolecarboxylic acid)  
RN 124078-64-4 HCAPLUS  
CN 2,5-Pyrrolidinedione, 1-[1-oxo-2-(4-(phenylmethyl)-1-piperazinyl)propoxy]-, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



**AB** Synthetic routes to cyclic peptides cyclo(Sar-EAA)<sub>4</sub> (EAA = residue of title acid I) and cyclo(Sar-Sar-EAA)<sub>2</sub> are described. Interaction of these cyclic peptides with p-toluenesulfonic acid salt of sodium, benzylamine, and 4-phenylbutylamine were studied by <sup>1</sup>H NMR.

ACCESSION NUMBER: 1988:423356 HCAPLUS  
DOCUMENT NUMBER: 109:23356  
TITLE: Interactions of organic substrates with 30- and 36-membered ring peptides containing (2S, 3'S)-2-(?'-oxo-3'-methylpiperazin-1'-yl)propanoic acid and sarcosine  
AUTHOR(S): Kojima, Yoshitane; Yamashita, Tetsushi; Shibata, Kozo; Ohauka, Akio  
CORPORATE SOURCE: Fac. Sci., Osaka City Univ., Osaka, 558, Japan  
SOURCE: Polymer Journal (Tokyo, Japan) (1987), 19(10), 1221-3  
CODEN: POLJB8; ISSN: 0032-3896

DOCUMENT TYPE: Journal  
LANGUAGE: English

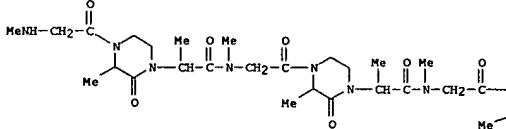
IT 114967-10-1P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(preparation and cyclization of)  
RN 114967-10-1 HCAPLUS  
CN 1-Piperazinoneacetamide, N-[2-[4-[2-[2-[4-[2-[2-(2,5-dioxo-1-pyrrolidinyl)oxy]-1-methyl-2-oxoethyl]-2-methyl-3-oxo-1-piperazinyl]-2-oxoethyl]-N-<sub>3</sub>-trimethyl-4-[[[methyl][2-(3-methyl-1-((methylamino)acetyl)-2-oxo-1-piperazinyl)-1-oxopropyl]amino]acetyl]-2-oxo-, [3S-[1[R\*][R\*][R\*(R\*)]]], 3R\*, 4[R\*(R\*)]], mono(trifluoroacetate) (9CI) (CA INDEX NAME)

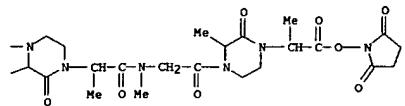
CM 1

CRN 114967-09-8

CMB C48 H73 N13 O15

PAGE 1-A





CH 2

CRN 76-05-1  
CHF C2 H F3 O2



\* 10765267 Amend

\* => s 113  
L19 11 L13

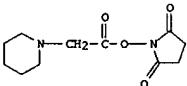
=> d ed abs ibib hitstr 1-11

L19 ANSWER 1 OF 11 HCAPLUS COPYRIGHT 2006 ACS on STN  
 ED Entered STN: 08 Jul 2005  
 AB This invention pertains to isobarically labeled analytes and fragment ions thereof.

ACCESSION NUMBER: 2005:588349 HCAPLUS  
 DOCUMENT NUMBER: 143:112150  
 TITLE: Isobarically labeled analytes and fragment ions derived therefrom  
 INVENTOR(S): Pappin, Darryl J. C.; Purnayastha, Subhasish; Coull, James M.  
 PATENT ASSIGNEE(S): Applera Corporation, USA  
 SOURCE: U.S. Pat. Appl. Publ., 88 pp., Cont.-in-part of U.S. Ser. No. 822,639.  
 CODEN: USXKCO  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 6  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2005148087	A1	20050707	US 2004-852730	20040524
US 2005147982	A1	20050707	US 2004-751353	20040105
US 2005147985	A1	20050707	US 2004-822639	20040412
WO 2005068446	A1	20050728	WO 2005-US23	20050105
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TG				
PRIORITY APPLN. INFO.:		US 2004-751353	A2 20040105	
		US 2004-822639	A2 20040412	
		US 2004-751354	A 20040105	
		US 2004-751387	A 20040105	
		US 2004-751388	A 20040105	
		US 2004-852730	A 20040524	

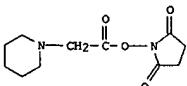
OTHER SOURCE(S): MARPAT 143:112150  
 IT 741683-79-4P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (isobarically labeled analytes and fragment ions derived therefrom)  
 RN 741683-79-4 HCAPLUS  
 CN 2,5-Pyrrolidinedione, 1-[(1-piperidinylacetyl)oxy]- (9CI) (CA INDEX NAME)



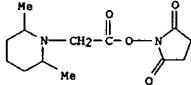
L19 ANSWER 2 OF 11 HCAPLUS COPYRIGHT 2006 ACS on STN  
 ED Entered STN: 08 Oct 2004  
 AB Provided is a method for characterizing a mol. by mass spectrometry, which mol. comprises one or more free amino groups, which method comprises: (a) reacting one or more free amino groups in the mol. with a mass tag reagent comprising a reactive functionality capable of reacting with an amino group, and (b) characterizing the mol. by mass spectrometry.  
 ACCESSION NUMBER: 2004:824132 HCAPLUS  
 DOCUMENT NUMBER: 141:310231  
 TITLE: Mass labels  
 INVENTOR(S): Hamon, Christian; Kuhn, Karsten; Thompson, Andrew; Reuschling, Dieter; Schaefer, Juergen  
 PATENT ASSIGNEE(S): Xillion G.m.b.H. & Co. K.-G., Germany; Proteome Sciences PLC  
 SOURCE: PCT Int. Appl., 63 pp.  
 CODEN: PIXKD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004086050	A2	20041007	WO 2004-GB1167	20040318
WO 2004086050	A3	20041229		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2520297	AA	20041007	CA 2004-2520297	20040318
EP 1606623	A2	20051221	EP 2004-721565	20040318
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK				
NO 2005004684	A	20051012	NO 2005-4684	20051012
PRIORITY APPLN. INFO.:		GB 2003-6756	A 20030324	
		WO 2004-GB1167	W 20040318	

IT 741683-79-4P 768385-34-8P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (mass labels)  
 RN 741683-79-4 HCAPLUS  
 CN 2,5-Pyrrolidinedione, 1-[(1-piperidinylacetyl)oxy]- (9CI) (CA INDEX NAME)



RN 768385-34-8 HCAPLUS  
 CN 2,5-Pyrrolidinedione, 1-[(2,6-dimethyl-1-piperidinyl)acetyl]oxy]- (9CI)



L19 ANSWER 3 OF 11 HCAPLUS COPYRIGHT 2006 ACS on STN

ED Entered STN: 20 Aug 2004

AB This invention pertains to methods, mixts., kits and/or compns. for the determination of analytes by mass anal. using unique labeling reagents or sets of unique labeling reagents. The labeling reagents can be isomeric or isobaric and can be used to produce mixts. suitable for multiplex anal. of the labeled analytes.

ACCESSION NUMBER: 2004-681717 HCAPLUS

DOCUMENT NUMBER: 141:202794

TITLE: Methods, mixtures, kits and compositions pertaining to

analytic determination

INVENTOR(S): Pappin, Darryl J. C.; Bartlet-Jones, Michael

PATENT ASSIGNEE(S): Applied Corporation, USA

SOURCE: PCT Int. Appl., 105 pp.

CODEN: PIXKD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

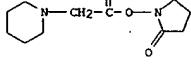
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004070352	A2	20040819	WO 2004-US2077	20040127
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, RU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, RW, BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2488584	AA	20040819	CA 2004-2488584	20040127
US 2004219685	A1	20041104	US 2004-765264	20040127
US 2004220412	A1	20041104	US 2004-765267	20040127
US 2004219686	A1	20041104	US 2004-765458	20040127
EP 1588145	A2	20051026	EP 2004-705571	20040127
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
PRIORITY APPLN. INFO.: US 2003-443612P			P 20030130	
			WO 2004-US2077	W 20040127

IT 741683-79-4P 741683-86-3P 741683-93-2P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(methods, mixts., kits and compns. pertaining to analytic determination)

RN 741683-79-4 HCAPLUS

CN 2,5-Pyrrolidinedione, 1-[(1-piperidinylacetyl)- (9CI) (CA INDEX NAME)



RN 741683-86-3 HCAPLUS

CN 2,5-Pyrrolidinedione, 1-[(1-piperidinylacetyl)- (9CI) (CA INDEX NAME)]

L19 ANSWER 4 OF 11 HCAPLUS COPYRIGHT 2006 ACS on STN

ED Entered STN: 17 May 2004

AB The process comprises N-alkylating sainsonine with bromoacetic acid N-succinimido ester in acetone under refluxing, coupling with bovine serum albumin in water at 0 °C, dialyzing, freeze drying, and emulsifying with Freund's adjuvant.

ACCESSION NUMBER: 2004-399339 HCAPLUS

DOCUMENT NUMBER: 141:254556

TITLE: Grassland's locoweed toxin vaccine

INVENTOR(S): Dong, Dewen; Cao, Guangrong; Zhao, Baoyu; Ge, Pengbin; Danong Biotechnology Co., Ltd., Yangling, Peop. Rep. China

PATENT ASSIGNEE(S): Faming Zhusanli Shengqing Gongkai Shuomingshu, 17 pp.

SOURCE: CODEN: CHXKEV

DOCUMENT TYPE: Patent

LANGUAGE: Chinese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

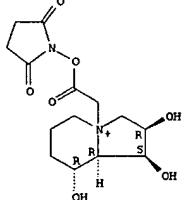
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 1395967	A	20030212	CN 2002-114592	20020524
PRIORITY APPLN. INFO.: IT 754196-04-8P			CN 2002-114592	20020524

RL: PR (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(vaccine for Grassland's locoweed toxin)

RN 754196-04-8 HCAPLUS

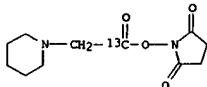
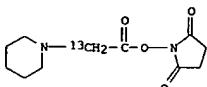
CN Indolizinium, 4-[2-[(2,5-dioxo-1-pyrrolidinyl)oxy]-2-oxoethyl]octahydro-1,2,8-trihydroxy-, bromide, (1S,2R,8aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



● Br-

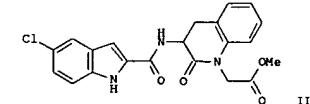
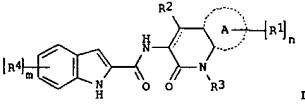
L19 ANSWER 3 OF 11 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)

RN 741683-93-2 HCAPLUS  
CN 2,5-Pyrrolidinedione, 1-[(1-piperidinylacetyl)- (9CI) (CA INDEX NAME)]

L19 ANSWER 5 OF 11 HCAPLUS COPYRIGHT 2006 ACS on STN

ED Entered STN: 14 Sep 2003

GI



AB The title compds. [I; A = phenylene or heteroarylene; m = 0-2; n = 0-2; R1 = halo, NO2, CN, OH, CO2H, etc.; R2 = H, OH, CO2H; R3 = H, OH, aryl, heterocycl, etc.; R4 = H, halo, NO2, CN, etc.] which possess glycogen phosphorylase inhibitory activity and accordingly have value in the treatment of disease states associated with increased glycogen phosphorylase activity such as diabetes type II, were prepared. Thus, amidation of 5-chloro-1H-indole-2-carboxylic acid with Me 2-(3-amino-2-oxo-3,4-dihydroquinolin-1-(2H)-yl)acetate (preparation given) in the presence of HOBT, DCM and EDCl afforded S91 II. The compds. I showed IC50 values in the range 100μM to 1mM against hrl glycogen phosphorylase a. Pharmaceutical composition comprising the compound I was claimed.

ACCESSION NUMBER: 2003-719471 HCAPLUS

DOCUMENT NUMBER: 139:261174

TITLE: Preparation of N-heterocyclyl indole-2-carboxamides as

glycogen phosphorylase inhibitors

INVENTOR(S): Birch, Alan Martin; Morley, Andrew David

PATENT ASSIGNEE(S): Astrazeneca AB, Swed.; Astrazeneca UK Limited

SOURCE: PCT Int. Appl., 86 pp.

CODEN: PIXKD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

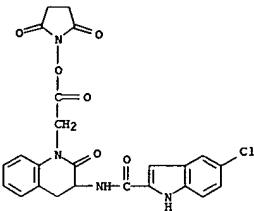
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003074513	A2	20030912	WO 2003-GB893	20030304
WO 2003074513	A3	20031231		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, RU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW  
KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,

L19 ANSWER 5 OF 11 HCPLUS COPYRIGHT 2006 ACS on STN (Continued)  
 BP, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG  
 AU 2003216991 A1 20030916 AU 2003-216991 20030304  
 EP 1485371 A2 20041215 EP 2003-712313 20030304  
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, NL, SE, MC, PT,  
 IE, SI, LT, LV, FI, PL, MK, CY, AL, TR, BG, CZ, EE, HU, SK  
 US 2005131016 A1 20050616 US 2003-506748 20030304  
 JP 2005525364 T2 20050825 JP 2003-572981 20030304  
 PRIORITY APPLN. INFO.: GB 2002-5162 A 20020306  
 WO 2003-G8893 W 20030304

OTHER SOURCE(S): MARPAT 139:261174

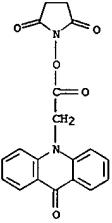
IT 599193-13-2P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation of 1-heterocyclyl indole-2-carboxamides as glycogen phosphorylase inhibitors)  
 RN 599193-13-2 HCPLUS  
 CN 1H-Indole-2-carboxamide, 5-chloro-N-[1-{[2-[(2,5-dioxo-1-pyrrolidinyl)oxy]-2-oxethyl}-1,2,3,4-tetrahydro-2-oxo-3-quinolinyl]- (9CI) (CA INDEX NAME)



L19 ANSWER 6 OF 11 HCPLUS COPYRIGHT 2006 ACS on STN (Continued)  
 ED Entered STN: 01 Dec 1999  
 AB A simple and sensitive LC method that rapidly labels amino compds. including amino acids, using acridine-9-N-acetyl-N-hydroxysuccinimide (AAHS) which was synthesized by the reaction of acridine-9-N-acetic acid with benzenesulfonyl-N-hydroxysuccinimide, was developed. A mixture of amines is treated with AAHS in the presence of triethylamine in non-aqueous acetonitrile or in 0.2 mol l<sup>-1</sup> borate buffer at pH 8.0-9.0 in 40% volume/volume acetonitrile solution to give quant. yields of amides. The emission maximum for the derivatized amines is 435 nm (λex = 404 nm). The labeled derivs. are very stable; no significant decomposition is observed after heating in 50% acetonitrile at 40° for 24 h. Studies on the derivatization conditions indicate that amines or amino acids react very rapidly with AAHS under the proposed conditions. The method, in conjunction with a multi-step gradient, offers baseline resolution of common amine or amino acid derivs. on a reversed-phase C18 column. This method is more convenient and more efficient than previous methods which require prior conversion of carboxylic acids to acyl chlorides, which are unstable to moisture. The LC separation of amine or amino acid derivs. has good reproducibility. The established method is also suitable for the determination of other amine compds. in various biol. fluids.

ACCESSION NUMBER: 1999-759500 HCPLUS  
 DOCUMENT NUMBER: 132:148595  
 TITLE: Characterization and application of acridine-9-N-acetyl-N-hydroxysuccinimide as a pre-column derivatization agent for fluorimetric detection of amino acids in liquid chromatography  
 AUTHOR(S): You, Jimiao; Lao, Wenjian; You, Jing; Wang, Guojun  
 CORPORATE SOURCE: Lanzhou Inst. Chem. Phys., Chinese Academy of Sciences, Lanzhou, 730000, Peop. Rep. China  
 SOURCE: Analyst (Cambridge, United Kingdom) (1999), 124(12), 1755-1760  
 PUBLISHER: ANALAO; ISSN: 0003-2654  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 IT 150321-96-3P  
 RL: ARG (Analytical reagent use); SPN (Synthetic preparation); ANST (Analytical study); PREP (Preparation); USES (Uses)  
 (characterization and application of acridine-9-N-acetyl-N-hydroxysuccinimide as a pre-column derivatization agent for fluorimetric detection of amino acids in liquid chromatog.)  
 RN 150321-96-3 HCPLUS  
 CN 2,5-Pyrrolidinedione, 1-[[((9-oxo-10(9H)-acridinyl)acetyl)oxy]- (9CI) (CA INDEX NAME)

L19 ANSWER 6 OF 11 HCPLUS COPYRIGHT 2006 ACS on STN (Continued)



REFERENCE COUNT: 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L19 ANSWER 7 OF 11 HCPLUS COPYRIGHT 2006 ACS on STN (Continued)  
 ED Entered STN: 26 Mar 1996  
 AB The synthesis of 10,10'-substituted-9,9'-bisacridine mols. and their derivs. is disclosed. These mols. catalyze the production of light by chemiluminescence in the presence of a signal solution having at a pH from about 10.0 to about 14.0, at a concentration effective for producing a chemiluminescent signal, a chelating agent, a sulfoxide, a reducing sugar, and oxidant or combination of oxidants, an alc. and aqueous sodium tetraborate. These 10,10'-substituted-9,9'-bisacridines are used alone or attached to haptens or macromols. and are utilized as labels in the preparation of chemiluminescent, homogeneous or heterogeneous assays. They are also used in conjunction with other chemiluminescent label mols. to produce multiple analytic chemiluminescent assays. An assay demonstrating the linearity of the signal with increasing dilns. of an anti-TSH-10,10'-para-toluoyl-9,9'-bisacridine conjugate is described.

ACCESSION NUMBER: 1996-171871 HCPLUS  
 DOCUMENT NUMBER: 124:225820  
 TITLE: Preparation of derivatized 10,10'-substituted-9,9'-bisacridine luminescent molecules and signal solutions  
 INVENTOR(S): Katsilometes, George W.  
 PATENT ASSIGNEE(S): USA  
 SOURCE: PCT Int. Appl., 50 pp.  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9600392	A1	19960104	WO 1995-US7966	19950622
W: CN, JP, KR RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
EP 766825	A1	19970409	EP 1995-924671	19950622
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
CN 1155931	A	19970730	CN 1995-194681	19950622
JP 10502346	T2	19980303	JP 1995-503340	19950622
US 5866335	A	19990202	US 1996-767288	19961216
HK 1001416	A1	20050826	HK 1998-100291	19980114

PRIORITY APPLN. INFO.: US 1994-265481 A 19940624  
 WO 1995-US7966 W 19950622

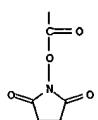
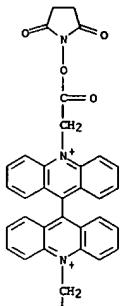
IT 174569-85-8  
 RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)  
 (preparation of bisacridine luminescent derivs. and signal solns.)

RN 174569-85-8 HCPLUS

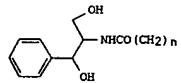
CN 9,9'-Biacridinium, 10,10-bis[2-[(2,5-dioxo-1-pyrrolidinyl)oxy]-2-oxoethyl]- dinitrate (9CI) (CA INDEX NAME)

CM 1

CRN 174569-84-7  
 CMF C38 H28 N4 O8



CH 2

CRN 14797-55-8  
CMF N O3

**AB** Fluorescent compds. useful in the determination of chloramphenicol acetyltransferase (CAT) enzyme activity are described. The compds. BASE-Ns-X are fluorescent derivs. related in structure to chloramphenicol comprising a base (I), substituted at one to five aromatic ring positions by substituents, which may be the same or different, that are alkyl, hydroxy, alkoxy, aryl, halo, nitro, amino, alkylamido, or arylamido, and 0 < n < 6; and a fluorescent moiety "X" (nonreduced tricyclic difluoroboradiazaindane fluorophore) linked to the terminal CH2 of BASE through a linker NH (e.g., NHX, NHCOCH2X'). The substrate compds. are acylated in the presence of CAT to produce fluorescent mono- and diacylated products, which are then phys. separated from the reaction mixture and quantitated by means of their fluorescence and/or absorbance. Fluorescent mols. conjugated to chloramphenicol include derivs. of fluorescein, rhodamine, coumarin, dimethylaminonaphthalenesulfonic acid (dansyl), pyrene, anthracene, nitrobenzoxadiazole (NBD), acridine and dipyrrometheneboron difluoride.

ACCESSION NUMBER: 1994:435864 HCAPLUS

DOCUMENT NUMBER: 121:35864

TITLE: Fluorescent chloramphenicol derivatives for determination of chloramphenicol acetyltransferase activity

INVENTOR(S): Haughland, Richard P.; Kang, Hee C.; Young, Steven L.; Melner, Michael H.

PATENT ASSIGNEE(S): Molecular Probes, Inc., USA

SOURCE: U.S., 13 pp. Cont. of U.S. Ser. No. 321,494, abandoned.

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5262545	A	19931116	US 1991-722352	19910618
US 5364764	A	19941115	US 1992-994992	19921221
PRIORITY APPLN. INFO.:			US 1989-321494	B1 19890309
			US 1991-722352	A3 19910618

OTHER SOURCE(S): MARPAT 121:35864

IT 150321-96-3

RL: RCT (Reactant); RACT (Reactant or reagent)  
(fluorescent chloramphenicol derivs. for determination of chloramphenicol acetyltransferase activity)

RN 150321-96-3 HCAPLUS

CN 2,5-Pyrrolidinedione, 1-[(9-oxo-10(9H)-acridinyl)acetyl]oxy]- (9CI) (CA INDEX NAME)

**AB** A photoluminometric immunoassay comprises reacting 2 immunoreactants, 1 labeled with a photoluminescent energy transfer donor capable of photoluminescence and the other labeled with a photoluminescent energy transfer acceptor complementary to the donor; exciting the sample with radiation; and calculating the apparent luminescence lifetime to determine the presence of a reaction product. Studies were done using goat anti-mouse IgG labeled with the donor dichlorotriazinylaminofluorescein and mouse IgG labeled with the acceptor tetramethylrhodamine isothiocyanate.

ACCESSION NUMBER: 1994:101282 HCAPLUS

DOCUMENT NUMBER: 120:101282

TITLE: Fluorescent energy transfer immunoassay

INVENTOR(S): Lakowicz, Joseph; Maiwal, Badri; Thompson, Richard; Ozinskas, Alyvydas

PATENT ASSIGNEE(S): University of Maryland, USA

SOURCE: Eur. Pat. Appl., 26 pp.

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

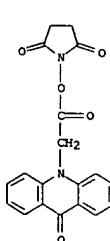
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 552108	A2	19930721	EP 1993-400091	19930115
EP 552108	A3	19930922		
R: DE, FR, GB, IT				
CA 2087413	AA	19930710	CA 1993-2087413	19930115
JP 06066802	A2	19940311	JP 1993-6057	19930118
JP 3225939	B2	20020917		
US 56311169	A	19970520	US 1994-183238	19940119
PRIORITY APPLN. INFO.:			US 1992-822233	A 19920117

IT 150321-96-3D, conjugates with immunoreactant

RL: ANST (Analytical study)  
(in photoluminometric immunoassay)

RN 150321-96-3 HCAPLUS

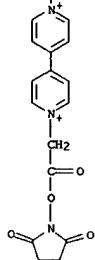
CN 2,5-Pyrrolidinedione, 1-[(9-oxo-10(9H)-acridinyl)acetyl]oxy]- (9CI) (CA INDEX NAME)



● 10765267Amend

L19 ANSWER 10 OF 11 HCAPLUS COPYRIGHT 2006 ACS on STN  
 ED Entered STN: 01 Nov 1992  
 AB Metmyoglobin covalently linked with viologen was prepared and reduced by dithionite ions faster than the native metmyoglobin, suggesting that the reduction by dithionite of the attached viologen was followed by a rapid intramol. electron transfer from the viologen radical cation to the heme iron center.  
 ACCESSION NUMBER: 1992:566123 HCAPLUS  
 DOCUMENT NUMBER: 117:166123  
 TITLE: Effect of the chemical modification by viologen on the reduction of metmyoglobin  
 AUTHOR(S): Tsukahara, Keiichi; Todorobaru, Hiromi  
 CORPORATE SOURCE: Fac. Sci., Nara Women's Univ., Nara, 630, Japan  
 SOURCE: Chemistry Letters (1992), (7), 1181-4  
 CODEN: CMLTAG; ISSN: 0366-7022  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 IT 143674-76-4P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and coupling of, with metmyoglobin)  
 RN 143674-76-4 HCAPLUS  
 CN 4,4'-Bipyridinium, 1-[2-[(2,5-dioxo-1-pyrrolidinyl)oxy]-2-oxoethyl]-1'-methyl-, dipерchlorate (9CI) (CA INDEX NAME)

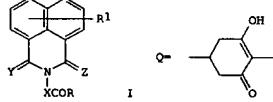
L19 ANSWER 10 OF 11 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)



CM 1

CRN 143674-75-3  
 CMF C17 H17 N3 O4

L19 ANSWER 11 OF 11 HCAPLUS COPYRIGHT 2006 ACS on STN  
 ED Entered STN: 05 Oct 1991  
 GI



AB The title compds. [I: R = ON:CR5R6; R1 = 1-4 substituents which may be the same or different selected from H, halo, cyano, (halo)alkyl, etc.; R5 = H, cyano, alkyl, alkenyl, etc.; R6 = H, cyano, (halo)alkyl, alkoxy, etc.; X = (un)substituted alkylene; Y, Z = O, S] were prepared as safeners for 2-[(hetero)aryloxyphenoxyl]acetate and -propionate or alkoximinomethylenecyclohexenone herbicides. Thus, I (R1 = H, X = CH2, Y = Z = O) (II: R = Cl) (preparation given) was condensed with Me2C:NHOH to give II (R = ON:CH2) (R5R6 = (CH2)3CH:C(OEt)2) reduced damage to wheat of 0.03 kg/ha of the herbicide Et5CH(MeH2)2ClC(:NOEt)Pr (21 = hydroxycyclohexenoneyl group Q) from 70 to 10% (with 95% control of annual ryegrass) at 0.125 kg/ha.

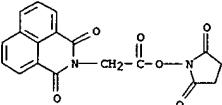
ACCESSION NUMBER: 1991:535937 HCAPLUS  
 DOCUMENT NUMBER: 115:135937  
 TITLE: Preparation of N-[[(alkylenimino)oxygenyl]alkyl]-1,8-naphthalenedicarboximides and analogs as herbicide safeners  
 INVENTOR(S): Saupe, Thomas; Meyer, Norbert; Plath, Peter; Schirmer, Ulrich; Wuerzer, Bruno; Westphalen, Karl Otto; Patsch, Manfred; Pfister, Juergen  
 PATENT ASSIGNEE(S): BASF A.-G., Germany  
 SOURCE: Eur. Pat. Appl., 45 pp.  
 CODEN: EPKWDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 430004	A2	19910605	EP 1990-122030	19901117
EP 430004	A3	19911218		
DE 3939379	A1	19910606	DE 1989-3939379	19891129
DE 4021654	A1	19920109	DE 1990-4021654	19900707
CA 2030129	AA	19910530	CA 1990-2030129	19901116
US 5076831	A	19911231	US 1990-615865	19901120
JP 03190861	A2	19910820	JP 1990-323392	19901129
PRIORITY APPLN. INFO.:			DE 1989-3939379	A 19891129
			DE 1990-4021654	A 19900707

OTHER SOURCE(S): MARPAT 115:135937

IT 135980-49-3P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of, as herbicide safener)  
 RN 135980-49-3 HCAPLUS  
 CN 1H-Benz[de]isoquinoline-1,3(2H)-dione, 2-[2-[(2,5-dioxo-1-pyrrolidinyl)oxy]-2-oxoethyl]- (9CI) (CA INDEX NAME)

L19 ANSWER 11 OF 11 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)



▲ 10765267Amend

↳ => s 115  
L20 107 L15

=> s 120 and isotop?  
321646 ISOTOP?  
L21 0 L20 AND ISOTOP?

=> log H

COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	160.84	837.61
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
CA SUBSCRIBER PRICE	ENTRY	SESSION
	-21.75	-21.75

SESSION WILL BE HELD FOR 60 MINUTES  
STN INTERNATIONAL SESSION SUSPENDED AT 18:26:35 ON 08 MAR 2006